166

166-617

TRANSCRIPT OF RECORD.

SUPREME COURT OF THE UNITED STATES.

OCTOBER TERM, 1896.

No. 247.

THE TEXAS AND PACIFIC RAILWAY COMPANY, PLAINTIFF IN ERROR,

vs.

WILLIAM K. BARRETT.

IN ERROR TO THE UNITED STATES CIRCUIT COURT OF APPEALS FOR THE FIFTH CIRCUIT.

FILED MARCH 20, 1895.

(15,838.)

(15,838.)

SUPREME COURT OF THE UNITED STATES.

OCTOBER TERM, 1896.

No. 247.

THE TEXAS AND PACIFIC RAILWAY COMPANY, PLAINTIFF IN ERROR,

vs.

WILLIAM K. BARRETT.

IN ERROR TO THE UNITED STATES CIRCUIT COURT OF APPEALS FOR THE FIFTH CIRCUIT.

INDEX.

	Original.	Print.
Caption	1	1
Transcript of record from the circuit court of the United States for the northern district of Texas	3	1
Caption	3	2
Transcript from State court	3	2
Plaintiff's original petition	3	2
Citation	6	4
Sheriff's return	7	5
Answer of defendant	8	5
Petition for removal to United States circuit court	8	6
Bond for removal to United States circuit court	11	8
Order for removal to United States circuit court	12	9
Statement of costs	13	9
Clerk's certificate	13	9
Plaintiff's first amended original petition	13	10
Amended original answer	19	13
Judgment	20	14
Motion for new trial	21	15
Order denying motion for new trial, &c.	23	17

JUDD & DETWEILER, PRINTERS, WASHINGTON, D. C., MARCH 9, 1897.

	Original.	Print.
Bill of exceptions	23	17
Testimony of W. K. Barrett	23	17
Dr. E. D. Capps	28	20
Wesley F. White	29	21
Lee Baur	31	22
John E. Martin	35	25
John McFarland	37	26
S. O. Bissett	43	30
Dr. H. C. Stevens	46	32
D. W. McCullum	48	34
Joseph Potton	54	38
C. W. Deits	60	42
Charles M. Wells	66	46
George M. Lovett	75	52
E. W. Hayes	79	54
J. A. Lloyd	82	57
George M. Lovett (recalled)	84	57
Charles M. Wells (recalled)	84	58
R. J. Thompson	85	59
Defendant's requests	88	60
Charge	89	61
Exceptions to charge	92	63
Agreement as to bill of exceptions	93	64
Judge's certificate to bill of exceptions	93	64
Assignment of errors	93	64
Petition for writ of error	97	66
Bond on writ of error	98	67
Writ of error	99	68
Citation and acceptance of service of same	100	69
Clerk's certificate	101	69
Order for continuance	102	70
Hearing and submission	102	70
Judgment	103	70
Assignment of errors	104	71
Petition for writ of error	112	74
Bond on writ of error	114	75
Opinion	116	76
Writ of error	123	79
Citation	124	79
Acceptance of service of citation	125	80
Clerk's certificate	126	80

1 & 2 UNITED STATES OF AMERICA, }
Fifth Judicial District. }

Pleas and proceedings had and done at a regular term of the United States circuit court of appeals for the fifth circuit, begun and held, pursuant to law, on the third Monday of November, A. D. 1893, in the court-room of said court, in the city of New Orleans, State of Louisiana, before the Honorable A. P. McCormick, United States circuit judge for the fifth judicial circuit; the Honorable John Bruce, United States district judge for the northern and middle districts of Alabama, and the Honorable Harry T. Toulmin, United States district judge for the southern district of Alabama.

TEXAS & PACIFIC RAILWAY COMPANY, Plaintiff in Error, }
v.
W. K. BARRETT, Defendant in Error. }

Be it remembered that heretofore, to wit, on the 26th day of March, A. D. 1894, a transcript of the record of the above-styled cause from the United States circuit court for the northern district of Texas was filed in the office of the clerk of said United States circuit court of appeals in the words and figures following, to wit:

3 *Caption.*

Be it remembered, that at a term of the circuit court of the United States in the fifth circuit thereof and in and for the northern district of Texas, at Dallas, begun and holden at Dallas, Texas, on the 8th day of January, A. D. 1894, and which term adjourned on the 9th day of March, A. D. 1894, the Hon. John B. Rector, United States district judge for the northern district of Texas, presiding, the following proceedings were had and the following cause came on for trial and was tried, to wit:

W. K. BARRETT
vs.
TEXAS & PACIFIC RAILWAY COMPANY. } No. 1658, 1658.

Transcript of record from district court, Tarrant county. Filed May 15th, 1893.

Caption.

THE STATE OF TEXAS, }
County of Tarrant. }

Transcript of the record from the district court (17th judicial district) Tarrant county, Texas, to the circuit court of the United States for the northern district of Texas, at Dallas, Texas.

WM. K. BARRETT
vs.
TEXAS & PACIFIC R'Y CO. } 7660, 7660.

Plaintiff's Original Petition.

WM. K. BARRETT
vs.
TEXAS & PACIFIC R'Y CO. } Suit in District Court, Tarrant County, —— Term, 1893.

To the honorable district court of said county:

Your petitioner, Wm. K. Barrett, hereinafter styled plaintiff, complains of The Texas & Pacific Railway Company, hereinafter styled defendant, and would respectfully show to the court as follows, to wit: That plaintiff is a resident of said Tarrant county and that defendant is a railway corporation duly incorporated, and that it has in said Tarrant county an office and agency, and that J. T. Clements, of the city of Fort Worth, said county, is its local agent.

4

That on and before, to wit: the 19th day of February, 1893, defendant was the owner of and was operating in and through said Tarrant county, and into and through said city of Fort Worth a certain line of railway. That in said city defendant kept, operated, used and maintained at and before the time aforesaid a round-house, work and repair shops and incidental apartment, also yards, switches, tracks and premises contiguous and appurtenant thereto, which it then and there used for the reception, deposit and repair and keeping of railway engines and cars.

That on, to wit: said 19th day of February, 1893, plaintiff was in the employ of defendant in the capacity of night foreman, and as such it was and became his duty to labor and be upon said yards and premises, etc., and therein and thereon and to look after and direct the reception, deposit and departure of trains and engines. That on said day, in the night-time thereof, while plaintiff was in the discharge of said employment and duties upon said yards and premises and while he was in the exercise of due care, he was, without fault on his part, then and there seriously, painfully and per-

manently injured through the negligence and carelessness of defendant, its agents and servants. That defendant, its agents and servants, had then and there negligently and carelessly run, operated, deposited and left upon said yards and premises a locomotive engine, which was out of repair, weak and defective in so much that it while under steam then and there blew up, bursted and exploded into many pieces, driving and hurling plaintiff by the force and concussion thereof a long distance, and injuring him as before and hereinafter charged.

That before and at the time of said injury, among other defects in said engine and its boiler, there were many of the stay-
5 bolts in the boiler and other parts thereof broken, out of repair and out of fix; that the heads of many stay-bolts were worn and corroded out by rust and otherwise; that many of said stay-bolts were eaten and corroded by rust. That the sheets of many parts of said engine and its boiler were corroded and eaten away by rust to such an extent that much of the original thickness thereof was destroyed; by all of which defects and conditions in said engine and boilers the same was rendered dangerously weak, defective and out of repair, and that it could not bear and withstand steam and the pressure thereof to the extent that it could have done had the same been then and there in good and proper order and repair. That defendant was then and there and before said injury negligent and careless in not properly inspecting and repairing and causing to be inspected and repaired said defective and dangerous engine.

That by the explosion aforesaid plaintiff was seriously, painfully and permanently injured in and about the legs, hips, shoulders, spine, head, face and various other parts of his body. That as a result of said injury plaintiff has suffered, now suffers and for all his life will continue to suffer much physical and bodily pain and great mental anguish.

That since said injury, and as a result thereof, he has been confined to his bed and has been forced to expend, in and about an effort to cure himself of said injuries, large sums of money, to wit: five hundred dollars, and that hereafter he will have to expend for the same purpose much more money. That when injured as aforesaid, plaintiff was a young and robust man, was then and there earning a large salary, to wit: one hundred dollars or more per month, and had before him every prospect of a long, useful and happy life. That since said injury, and as a result thereof, he has been and for the remainder of his life will be rendered unfit and unable successfully to pursue any business or calling, and that as a result of said injuries his usefulness has been destroyed and his life's happiness and prospects have been blighted.

6 That defendant, well knowing or being chargeable with notice of the premises, negligently ran, operated, deposited and left, and negligently caused and permitted to be run, operated, deposited and left the said dangerous and defective engine in and upon its said yards and premises, although it knew or by the exer-

cise of reasonable care ought to have known that the same was in said condition, dangerous and unsafe.

Premises considered, plaintiff says he has been damaged in the sum of to wit: twenty thousand ($20,000.00) dollars. Wherefore he prays for citation in term of the law for judgment for his said damages, for all costs of suit and for general and special relief.

BEN. M. TERRELL,
Attorney for Plaintiff.

Filed March 22nd, 1893.

R. H. McNATT,
District Clerk.

Citation.

The State of Texas to the sheriff or any constable of Tarrant county, Greeting:

You are hereby commanded to summon the Texas and Pacific Railway Company to appear before the district court of Tarrant county, Texas, 17th district, at the next regular term thereof, to be held at the court-house in the city of Fort Worth on the second Monday in April A. D. 1893, the same being the 10th day of April, A. D. 1893, then and there to answer the petition of Wm. K. Barrett plaintiff, filed in said court on the 22nd day of March A. D. 1893, against the said Texas and Pacific R'y Co. defendant, for suit; said suit being numbered 7660, the nature of which demand is as follows, to wit:

That on February 19th, 1893, plaintiff was in the employ of defendant as night foreman at the round-house, workshops and yards of defendant, in the city of Fort Worth, Tarrant county,
7 Texas, and while then and there in the discharge of his duties in said yards and premises and exercising due care and without any fault on his part, plaintiff was then and there seriously, painfully and permanently injured by the explosion and bursting of one of defendant's locomotive engines, caused by and through the negligence and carelessness of defendant. That by reason of said explosion plaintiff was seriously, painfully and permanently injured in and about the legs, hips, shoulders, spine, head, face and various other parts of the body as a result of which plaintiff has suffered and now suffers and will always suffer the remainder of his life much physical and bodily pain and great mental anguish, and is thereby rendered for the balance of his life unfit and unable successfully to pursue any business or calling and his usefulness destroyed; that by reason of the premises plaintiff has been damaged in the sum of $20,000. Plaintiff prays judgment for his said damages, for costs of suit and for general and special relief; and you will deliver to the said defendant in person a true copy of this citation.

Herein fail not, and have you then and there this writ, showing how you have executed the same.

Witness, R. H. McNatt, clerk of the district court of Tarrant county, Texas.

Given under my hand and seal of office at Fort Worth, this the 23rd day of March, A. D. 1893.

R. H. McNATT,
Clerk of the District Court of Tarrant County, Texas.

Issued March 23d, 1893.

R. H. McNATT, *Clerk.*

Sheriff's Return.

Came to hand on the 23rd day of March, 1893, and executed the 24th day of March, 1893, by delivering to J. T. Clements, local agent at Fort Worth, Texas, of the Texas and Pacific Rail-
8 way Company, in person, a true copy of this citation, the within-named defendant in person a true copy of this writ.

E. A. EULESS,
Sheriff, Tarrant County, Texas,
By MAC McCART, *Deputy.*

Fees.

Serving copy	$1 50
Mileage	10
Total	$1 60

Answer of Defendant.

WM. K. BARRETT
vs.
THE TEXAS & PACIFIC R'Y CO. } Suit Pending in Dist. Court of Tarrant County, Texas.

Now comes the defendant in the above numbered and entitled cause and demurs to the petition of plaintiff herein filed, and says that the same is insufficient in law and shows no cause of action against it, and of this it prays the judgment of the court.

STEDMAN & THOMPSON,
Att'ys for Def't, T. & P. R'y Co.

And further answering in this behalf, the defendant denies all and singular the allegations in plaintiff's petition contained, and demands strict proof of same.

STEDMAN & THOMPSON,
Att'ys for Def't, T. & P. R'y Co.

Filed April 11th, 1893.

R. H. McNATT,
District Clerk.

Petition for Removal.

WM. K. BARRETT *vs.* THE TEXAS & PACIFIC R'Y CO.	In Dist. Court, Tarrant County, Texas.

The petition of the Texas and Pacific Railway Company respectfully shows to the court:

First. That the Texas and Pacific Railway Company was
9 and is a corporation duly organized and existing under and by virtue of the laws of the United States, to wit: "An act to incorporate the Texas and Pacific Railroad Company and to aid in the construction of its road, and for other purposes," approved March 3d, 1871, and acts amendatory thereof and supplemental thereto, including an act approved May 2, 1872, whereby, among other things, the name and style and title of said Texas and Pacific Railroad Company was changed to the "Texas and Pacific Railway Company."

Second. That the above-entitled action was commenced in the above-named court on the 22d day of March, 1893, and citation issuing therein was served upon this defendant on the 24th day of March, 1893, which said action is returnable on the 2d Monday in April, 1893, it being the 10th day of April, 1893, and this defendant is not, and will not be required by the laws of the State of Texas, or the rule of this court, to answer or plead to the petition of the plaintiff before the 13th day of April, 1893.

Third. That the matter in dispute in this case exceeds, exclusive of interest and cost, the sum or value of *value of* two thousand dollars, and this suit arises under the laws of the United States as hereinbefore and hereinafter more fully set forth; that this action was brought by the plaintiff; that on February 19, 1893, plaintiff was in the employ of the defendant as night foreman in the roundhouse, shops and yards in the city of Fort Worth, Texas, and while in the discharge of his duty was seriously and permanently injured by the explosion of one of the engines of defendant, caused through defendant's negligence and carelessness, thereby causing him great mental and physical suffering to plaintiff's damage, $20,000, as appears from plaintiff's petition, which is referred to for a more particular statement of the cause of action. This suit against this defendant is a suit arising under the laws of the United States, and more especially under the laws of the United States, constituting the charter of this defendant, and under which it was incorporated;
that is to say, the said act of Congress of the United States
10 approved March 3, 1871, entitled, "An act to incorporate the Texas and Pacific Railroad Company, and to aid in the construction of its road and for other purposes," and acts amendatory thereof and supplemental thereto, approved, respectively, on May 2d, 1872, March 3d, 1873, and June 22d, 1874.

Fourth. That the above-entitled action is a civil suit arising under the laws of the United States, of which the circuit court of

the United States, for the northern district of Texas is given original jurisdiction by act of Congress, approved March 3, 1887, to wit: an act entitled An act to amend the act of Congress, approved March 3, 1875, entitled, "An act to determine the jurisdiction of circuit courts of the United States and to regulate the removal of causes from State courts and for other purposes," and the acts of Congress, approved August 13, 1888, entitled, "An act to correct the enrollment of an act, approved March 3d, 1887, entitled, "An act to amend sections 1, 2, 3 and 10 of an act to determine the jurisdiction of circuit courts of the United States, and to regulate the removal of causes from the State courts, and for other purposes, approved March 3d, 1875."

Your petitioner herewith presents and files a good and sufficient bond, conditioned that it will enter and file in the circuit court of the United States for the northern district of Texas, on the first day of its next session, a copy of the record in this action, and for paying all costs that may be awarded by said circuit court, if said court shall hold that said suit is wrongfully or improperly removed thereto, and to enter special bail in said court, if special bail was originally requisite therein.

Your petitioner therefore prays the said court to accept the said petition and bond, and to remove this cause to the circuit court of the United States for the northern district of Texas, and for such other relief in the premises as may be just and equitable.

THE TEXAS AND PACIFIC RAILWAY COMPANY,
By STEDMAN & THOMPSON, *Attorneys.*

11 THE STATE OF TEXAS, }
County of Dallas. }

R. Fenby being duly sworn, says that he is the agent of the Texas and Pacific Railway Company, being the auditor of said company; that the said Texas and Pacific Railway Company is a corporation organized and existing under and by virtue of the United States; that he has read the foregoing petition and knows the contents thereof; that the facts therein stated are true.

R. FENBY.

Sworn to and subscribed before me this 6th day of April, 1893.

E. M. BECKWITH,
[SEAL.] *Notary Public, Dallas County, Texas.*

Filed the 11th day of April, A. D. 1893.

R. H. McNATT,
Clerk District Court, Tarrant County.

Bond for Removal.

WM. K. BARRET *vs.* THE TEXAS & PACIF-C R'Y CO.	In the District Court, Tarrant Co., Texas.

Know all men by these presents, that The Texas and Pacific Railway Company as principal, and —— —— and —— —— as sureties, are held and firmly bound unto Wm. K. Barrett, in the penal sum of five hundred dollars, for the payment whereof well and truly to be made unto the said Wm. K. Barrett, his heirs and assigns, we jointly and severally bind ourselves, our successors, representatives, heirs and assigns firmly by these presents: yet upon these conditions, that

Whereas, the said Texas and Pacific Railway Company has filed its petition in the district court of Tarrant county, Texas, for the removal of a certain cause therein pending, wherein Wm. K. Barrett is plaintiff, and The Texas and Pacific Railway Company is defendant, said cause being numbered upon the docket of said court as No. 7660, to the circuit court of the United States for the northern district of Texas.

12 Now, therefore, if the said The Texas and Pacific Railway Company, shall enter in said circuit court of the United States for the northern district of Texas, a copy of the record in said suit on the first day of its next session thereof, and shall pay all costs which may be awarded by said circuit court of the United States, if said court shall hold that said suit was wrongfully or improperly removed thereto, and shall there appear and enter special bail in said suit, if the same was originally requisite in said cause, then this obligation shall be void; otherwise of full force and effect.

Witness our hands and seal, this 30th day of March, 1883.

THE TEXAS & PACIFIC RAILWAY COMPANY,
By STEADMAN & THOMPSON,
Attorneys for T. & P. R'y Co.

MAX ELSER.
J. P. SMITH.

Approved this 11th day of April, 1893.

W. D. HARRIS,
Judge District Court, 17th Judicial Dist.

Filed the 11th day of April, A. D. 1893.

R. H. McNATT,
Clerk District Court, Tarrant County, Texas.

Order of Removal.

WM. K. BARRETT *vs.* THE TEX. & PAC. R'Y CO. } 7660. Order of Removal, May 8th, 1893.

The application and bond of the defendant herein for removal of this cause to the circuit court of the United States for northern district of Texas, being present to the court; it is ordered that said bond be approved and said application for removal to said U. S. court be and is granted, and that this cause be removed to said U. S. court in manner and form as prescribed by law.

13 *Statement of Costs.*

Plaintiff's costs	$22 50
Defendant's costs	13 20
Total costs	$35 70

Certificate.

THE STATE OF TEXAS, *County of Tarrant.* }

I, R. H. McNatt, clerk of the district court of Tarrant county, Texas, do hereby certify that the above and foregoing transcript is a true and correct copy of all the proceedings had in said cause No. 7660, Wm. K. Barrett *vs.* The Texas & Pacific R'y Co., as the same appears of record and on file in my office.

Given under my hand and seal of said court at office in the city of Fort Worth, Texas, this the 13th day of May, A. D. 1893.

R. H. McNATT,

[SEAL.] *Clerk District Court, Tarrant Co., Texas.*

The foregoing has the following endorsement, to wit:

No. 1658. Wm. K. Barrett *vs.* Tex. & Pac. R'y Co. Transcript of record from district court Tarrant county. Filed May 15, 1893. J. H. Finks, clerk, by Chas. H. Lednum, deputy.

Pl't'ff's 1st Amended Original Petition. Filed January 16, 1894.

Suit pending in the Federal court for the northern district of Texas, sitting at Dallas, Texas, removed from the district court of Tarrant county, Texas, by defendant R'y Co.

WM. K. BARRETT
vs.
TEXAS AND PACIFIC RAILWAY COMPANY. } 7660.

Now comes plaintiff herein and leave of the court being
14 first obtained amends his original petition filed herein on to wit: March the 22nd, 1893, so that the same may hereafter read as follows, to wit:

To the hon. U. S. court for said northern district of Texas:

Your petitioner, Wm. K. Barrett, hereinafter styled plaintiff, complaining of The Texas and Pacific Railway Company, hereinafter styled defendant, would respectfully show to the court as follows, to wit: That plaintiff is a resident of said Tarrant county, Texas, and that defendant is a railway corporation duly incorporated, and that it has in said Tarrant county an office and agency, and that J. T. Clements of said city of Ft. Worth, said county, is its local agent.

That on and before, to wit: the 19th day of February, 1893, defendant was the owner of and was operating into and through said city of Ft. Worth, said county, a certain line of railway. That in said city defendant kept, operated, used and maintained at and before the time aforesaid, a round-house, work and repair shops and incidental apartments, also yards, switches, tracks and premises contiguous and appurtenant thereto, which it then and there used for the reception, deposit, repair and keeping of railway engines and cars.

That on to wit: said 19th day of February, 1893, plaintiff was in the employ of defendant in the capacity of a night foreman of a switch-engine then and there in use upon said def't's yard and premises and then and there by pl't'ff being used and operated and managed for defendant, and as such it became and was his duty to labor and be upon said yards and premises, etc., and therein and thereon to look after and direct the reception, deposit and departure of trains and engines, and to manage and operate and to supervise the use and operation of said switch-engine, etc.

Pl't'ff alleges that the explosion and injury herein charged was caused by def't's negligence in failing to furnish a safe and suitable engine at, around, about and with which it then and there became necessary to be and remain at work in the discharge of his
15 said duties and employment, and that defendant's said negligence caused the place and premises where pl't'ff was and when it was necessary for him to be then and there in the discharge of his said duties and employment to be, a dangerous, unsafe and

unsuitable place and premises for the discharge of his said duties and employment.

That on said day, in the night-time thereof, while plaintiff was in the discharge of said employment and duties upon said yards and premises and while he was in the exercise of due care, he was, without fault on his part, then and there seriously, painfully and permanently injured through the negligence and carelessness of defendant, its agent and servant, in furnishing and in negligently placing upon said yards and premises an engine defective and dangerous at and around which plaintiff was then and there at work in the discharge of his said duties and employment as aforesaid.

That defendant, its agents and servants, had then and there negligently and carelessly run, operated, deposited and left upon said yards and premises, and negligently furnished and had negligently left and placed upon said yards and premises a locomotive engine which was out of repair, weak and defective, insomuch that it, while under steam then and there blew up, bursted and exploded into many pieces, driving and hurling plaintiff while in the discharge of said employment, by the force and concussion thereof a long distance, injuring him as before and hereinafter charged.

That long before, and at the time of said injury, among other defects, in said engine and its boiler, there were many of the stay-bolts in the boiler and other parts thereof broken, out of fix and repair; that the heads of many of the stay-bolts were worn and corroded out by rust and otherwise; that many of said stay-bolts were eaten and corroded by rust, and that for such engine to have been a strong and safe engine said stay-bolts should have been in good condition and repair. That the sheets of many parts
16 of said engine and its boiler were corroded and eaten away by rust to such an extent that much of the original strength and thickness thereof was destroyed.

Plaintiff says that the defective condition of said engine and of the stay-bolts thereof and the consequent weak condition of said engine and its boiler were facts unknown to plaintiff, and that his employment furnished him no means to ascertain said facts, but he alleges that defendant knew of said defects and conditions of said engine and its stay-bolts before said explosion, or that it could, and should, have known the same by sufficient and necessary care in the inspection and repair of said engine and said defects, and he charges that said defects in said engine had existed for a long time prior to the explosion thereof, and that defendant, had it used proper diligence and care in inspecting and repairing the same, could have discovered and remedied said defects and prevented said explosion; he further charges that said defective condition of said stay-bolts, and said defective condition of said boiler caused said explosion, and plaintiff's said injury. By all of which defects and conditions in said engine and boiler the same was rendered weak, defective and out of repair, and that it could not bear and withstand steam and the pressure thereof to the extent that it could have done

had the same been then and there in good and proper order and repair.

That defendant was then and there before, and long before said injury had been, negligent and careless in not properly inspecting and repairing and in not causing to be properly inspected and repaired said defective and dangerous engine.

Plaintiff further alleges that defendant, its agent and servants, at and before the time of said explosion and injury, were negligent and careless in not having in use, operation and application upon its said line of railway and in said Ft. Worth, proper, sufficient and adequate rules, methods, ways and means of testing, examining, repairing and strengthening their steam-engines and boilers, and that whatever said rules, methods, etc., defendant might
17 have then and there had in use and application were not sufficient, sure, certain and adequate in the detecting of defects and danger in their said engines and boilers, and especially in the one hereinbefore charged to have exploded, and in the repairing of such defects and dangers in the same.

That the mode and manner and extent of testing, repairing and overhauling of its said engines and boilers by defendant then and there, and upon its line of railway in use was insufficient, inadequate and improper, and that defendant was negligent and careless in its said use and application of such mode and manner of so testing and repairing its said engines, and especially so with reference to the one hereinbefore charged to have exploded.

That the iron and other material out of which said engine, boiler, stay-bolts, etc., was builded, constructed, repaired and maintained (if repaired and maintained at all) was negligently and carelessly by defendant left and allowed to go and be unexamined and uninspected and unrepaired, and that such negligence and carelessness caused and contributed to cause the injury herein charged. And that plaintiff further shows to your honor that by reason of the negligence and want of care in the handling and use of said engine by the defendant, its agents and servants, the said locomotive did explode and cause the injuries to plaintiff herein stated.

That by the explosion aforesaid, plaintiff was seriously, painfully and permanently injured in and about the legs, hips, shoulders, spine, head, face and various other parts of his body and was scorched and burned by hot steam in and about the face, head, hands, etc. That as a result of said injury plaintiff has suffered, now suffers, and for all his life will continue to suffer, much physical and bodily pain and great mental anguish.

That since said injury and as a result thereof, he has been confined to his bed and has been forced to expend, in and about an effort to cure himself of said injuries, large sums of money,
18 to wit: five hundred dollars ($500), and that thereafter he will have to expend for the same purpose much more money. That when injured as aforesaid plaintiff was a young and robust man, was then and there earning a large salary, to wit: one hundred dollars ($100.00) or more per month, and had before him every prospect of a long, useful and happy life.

That since said injury, and as a result thereof, he has been and for the remainder of his life will be rendered unfit and unable successfully to pursue any business or calling in the line of his past occupation, for which he had served an apprenticeship, and that as a result of said injuries his usefulness has been destroyed and his life's happiness and prospects have been blighted.

That defendant well knowing, or being chargeable with notice of the premises, negligently ran, operated, deposited and left and furnished as aforesaid, and negligently caused and permitted to be run, operated, deposited and left and furnished as aforesaid, the said dangerous and defective engine, in its said dangerous and defective and improperly inspected condition in and upon its said yards and premises, and negligently rendered pl't'ff's said place of employment unsafe as aforesaid, although it knew, or by the exercise of reasonable care ought to have known, that the same was in said condition, dangerous and unsafe.

Premises considered, plaintiff says he has been damaged in the sum of to wit: twenty thousand six hundred ($20,600.00) dollars; wherefore he prays for citation in terms of the law, for judgment for his said damages, for all costs of suit and for general, equitable and special relief.

BEN. M. TERRELL,
Attorney for Plaintiff.

STATE OF TEXAS,
County of Tarrant.

FT. WORTH, TEXAS, *Jan.* 10, 1894.

We hereby waive the filing by plaintiff of this his first amended original petition in the U. S. court for the northern district of Texas, sitting at Dallas, Texas; and we hereby agree that the same shall be considered as if filed by plaintiff in said court, on this the 10th day of January, A. D. 1894.

STEDMAN & THOMPSON,
Attorneys for Defendant.

The foregoing has the following endorsement, to wit:
No. 1658. Wm. K. Barrett *vs.* The Texas & Pacific R'y Co. Pl't'ff's first amended original petition. Filed Jan'y 16, 1894. J. H. Finks, clerk, by Chas. H. Lednum, deputy.

Amended Original Answer.

Filed January 25, 1894.

W. K. BARRETT
vs.
THE TEX. & PAC. R'Y CO.

In the Circuit Court of the U. S. for the Northern District of Texas, at Dallas.

Now comes the defendant, and by leave of court amends its original answer filed herein on the 11th day of April, 1893, so that it shall hereafter read as follows:

Defendant says that plaintiff's amended original petition filed

herein on the 16th day of Jan., 1894, is legally insufficient; and of this defendant prays the judgment of the court.

For plea to said amended petition defendant denies all and singular its allegations and demands strict proof thereof, and of this defendant puts itself upon the country.

Specially answering said amended petition this defendant alleged that if plaintiff was injured as he claims, his being injured resulted from and was caused by the negligence of his fellow-servants; and this defendant is ready to verify.

STEDMAN & THOMPSON,
Att'ys for Def't.

Further answering herein defendant avers that it exercised due care in the selection of the engine alleged to have exploded and in keeping it in a reasonably safe condition and good repair; that it used due care in the selection, employment and retention of competent and skillful servants to inspect said engine from time to time and to keep same in good repair, and that to such servants was committed the inspection of said engine and the keeping of same in good condition and repair, defendant exercising over them such supervision and control *and* to render reasonably sure the faithful and efficient performance of said duties, and that defendant used all the care that the law required in respect to the procurement and keeping in good condition and repair said engine; and this defendant is ready to verify.

Further answering herein defendant avers that the person to whom it committed the duty of inspecting said engine and keeping same in good repair and condition carefully inspected same and kept same in good repair and condition; and this defendant is ready to verify.

STEDMAN & THOMPSON,
Att'ys for Pl'ff.

The foregoing has the following endorsement, to wit:

No. 1658. W. K. Barrett *vs.* Tex. & Pac. R'y Co. Amended original answer. Filed Jan'y 25, 1894. J. H. Finks, clerk, by Chas. H. Lednum, deputy.

Judgment.

From the minutes of the circuit court of the United States for the northern district of Texas, at Dallas, January term, 1894.

W. K. BARRETT
vs.
TEXAS & PACIFIC R'Y CO. } 1658.

JANUARY 30, 1894.

On January 25, 1894, this cause was regularly called for trial and came both parties, plaintiff and defendant, by their respective attor-

neys and announced ready; thereupon came a jury of twelve good and lawful men, to wit:

W. J. Blessing,	A. J. Scribner,	R. N. Couch,	J. A. Helm,
E. A. Davis,	T. A. White,	J. B. Loucks,	S. H. Nance,
O. P. Miller,	E. G. Knight,	M. L. Foote,	S. L. Kendall,

who were duly and legally elected, empanelled and sworn to try this cause, and who having heard the pleadings, evidence, argu-
21 ment of counsel and charge of the court, retired to consider of their verdict, and thereafter on this day, January 30th, 1894, returned into open court the following verdict, to wit:

"We, the jury, find for the plaintiff and assess his damages ($3,800.00) thirty-eight hundred dollars.

A. J. SCRIBNER, *Foreman.*"

It is therefore considered by the court and it is so ordered and adjudged that the plaintiff, William K. Barrett, do have and recover of and from the defendant, Texas & Pacific Railway Company, the said sum of thirty-eight hundred dollars ($3,800.00) with interest thereon from this date at the rate of six per centum per annum, besides all costs by him herein incurred and expended and for which execution may issue.

It is further ordered that the officers of court do have and recover of and from each party hereto, the costs by them herein incurred and for which execution also may issue.

Defendant's Motion for New Trial.

Filed February 1, 1894.

W. K. BARRETT *vs.* TEX. & PAC. R'Y CO. } In the U. S. Court, Northern District of Texas, at Dallas.

Now comes defendant and moves the court to grant it a new trial herein for the following reasons, viz:

1. Because the court erred in refusing to give special charge No. 1 asked by defendant.
2. Because the court erred in refusing special charge No. 2 asked by defendant.
3. Because the court erred in refusing special charge No. 3 asked by defendant.
4. Because the court erred in refusing special charge No. 4 asked by defendant.
5. Because the court erred in refusing special charge No. 5 asked by defendant.
6. Because the court erred in that part of its charge to the jury wherein it instructed the jury as follows: "By ordinary care
22 is meant such as a prudent man would use under same circumstances."
7. Because the court erred in stating to the jury that the plaintiff

claimed that the sheets of many parts of said engine and its boiler were corroded and eaten away by rust, and in afterwards charging that "if the jury should believe from the evidence under foregoing instructions that the boiler which exploded and injured plaintiff was defective and unfit for use, etc., and if said boiler exploded by reason of said defects and injured plaintiff, the defendant would be responsible for the injuries inflicted upon plaintiff," because correcting said two portions of the charge it submits to the jury an issue upon which there was absolutely no evidence to the prejudice of defendant.

8. Because the court erred in excluding from the jury, upon the objection of plaintiff, report of Geo. M. Lovett for the week ending January 22nd, 1893.

9. Because the court erred in admitting in evidence the declaration of Wesley F. White, testified by the witness R. J. Thompson as having been made by S. M. Beats.

10. Because the verdict of the jury is contrary to the evidence and unsupported by the evidence, there being no evidence showing what caused plaintiff to be injured.

11. Because the verdict of the jury is excessive, inasmuch as there is no reliable evidence of permanent injury to plaintiff and as it was proved that plaintiff is able to conduct business and earn a livelihood for himself and family; and further because even if plaintiff's injuries are permanent, the amount awarded him by the jury is greater than he is justly entitled to recover.

STEDMAN & THOMPSON,
Att'ys for Def't.

12. Because the verdict of the jury is contrary to the evidence in this: that the defendants showed, without contradiction, that the engine in question was selected with due care; that the defendant used due care in employing a competent inspector to examine
23 said engine and keep it in repair, and that said engine was properly inspected before the explosion occurred.

STEDMAN & THOMPSON,
Att'ys for Def't.

The foregoing has the following endorsement, to wit:

No. 1658. Wm. K. Barrett *vs.* Texas & Pacific R'y Co. Defendant's motion for new trial. Filed February 1, 1894. J. H. Finks, clerk, by Chas. H. Lednum, deputy.

Order on Motion for New Trial.

From the minutes of the circuit court of the United States for the northern district of Texas, at Dallas, January term, 1894.

W. K. BARRETT
vs.
TEXAS & PACIFIC R'Y CO. } 1658.

FEBRUARY 5TH, 1894.

On this day came on to be heard the motion of the defendant for a new trial in this cause and the court having heard and considered said motion and the argument of counsel thereon, is of the opinion that said motion is not well taken, and it is ordered and adjudged that said motion be and it is hereby refused.

It is further ordered by the court that the defendant be and it is hereby allowed thirty days from this date, within which time to prepare, submit and file its bill of exceptions herein.

Defendant's Bill of Exceptions. Filed March 3, 1894.

In the United States Circuit Court for the Northern District of Texas, at Dallas, Texas.

W. K. BARRETT
vs.
TEXAS & PACIFIC R'Y CO. } No. 1658.

Defendant's bill of exceptions.

Be it remembered, that on the trial of the above-entitled cause the following facts were established by the evidence introduced:

W. K. BARRETT in his own behalf testified:

24 I am the plaintiff in this case; am 36 years old. On the 19th of February, 1893, I was foreman in the T. & P. yard at Fort Worth. I had been in that employment about two years. The duties of the for-man of the switch-engine are to do general work, make up the train, get out, switch incoming trains, etc. My duties were principally to switch in the yards, in the east part of Fort Worth. I had been in the employ of the railroad about seven years. This injury of which I complain was incurred at three o'clock Sunday morning, the 19th of February, 1893. My duties required me to be in and about the yards and all parts of it. I was in the performance of those duties at the time I received the injuries complained of. The cause of the injuries I received was the explosion of this engine No. 219. I had nothing to do at all with this engine; it was a road engine that came in about an hour before the accident, came in from the east and left in that the round-house department. I don't know exactly how long it had been

there before the explosion took place, probably an hour or two hours at the round-house. I said "In that department," my department was the yard department. That was the mechanical department. This engine No. 219 that exploded was in the mechanical department; I had nothing at all to do with it. I don't know who put it on the track. It was ordered out by the round-house foreman. My duties didn't require me to inspect this engine or control it. Never worked about it in any manner. I was within 100 feet of the engine when it exploded and was blown about 83 feet further. I was right opposite the engine that exploded. Some pieces struck me but I don't know what it was, but it was supposed to be a piece of the jacket. I was hurt all over my body and principally about the hip and back and all about the head and face. I was bruised upon the back and hips. The effect is a continuous pain in my spine all the time. I have no use of my left leg at all; I am lame in it from the effects of the hurt in my hip and my right leg is partly dead from the effects of it. I laid in bed for six weeks after the explosion. I hobbled around on crutches for two months or one and a half months, I don't know which.

At that time I got $98.00 per month. I got 29 cents per hour, which equals $98.00 per month. I never was sick in my life or injured in any way prior to the explosion. I had no disease to that time. Now I am disabled and cannot work. I can't perform those duties that I performed at the time I worked for the railroad. In the performance of those duties I was required from time to time to get upon engines; I can't do that now. I had a physician attending me during my sickness; I paid doctor's bills. I paid ten dollars towards one bill and seven towards another, and my doctor's bill amounts to $71.00, I think. My drug bill amounts to $43.00 as near as I can get it.

I have suffered pain from the time I was hurt, and still suffer pain. My spine hurts me all the time through my back and hips. When I was in bed it seemed to be my back and hips mostly. At times I could not turn over in my bed for two or three weeks. I move about with pain now. I am not an expert engineer nor an expert machinist. I was burned and scorched by steam about my face and hands. It was my purpose to continue in the service of the company if it hadn't been for this accident, under the same salary. I followed that for a living. That was my regular employment.

Cross-examination:

I didn't see this engine when it came in. I don't remember to have seen it. The engine had been there for an hour or two. I remember hearing it come in, that is when the man went down to get it off and came back. I don't know it by hearsay, I was standing over there. I didn't see it when it came in. I know when it came in. I heard it whistle for the yard and saw it afterwards. I don't remember what other engine went out from Fort Worth that day. I happened to recollect this one because I had asked Mr.

Thomson if he was going to have her ready, and I saw her
26 out on the round-house track. I don't remember how many engines came in that day. I don't remember whether a large number came in that day, down to this time. I don't know whether at that time quite a large number came in every day. We didn't do a very big business then. I reckon there was half a dozen. I don't remember any other engine that came in that day. I didn't take any notice. The yard takes in all the yards. It takes in the yard limits; that takes in the round-house. Well, the round-house is not a part of the yards, but it is taken in by the yards.

This engine was on the round-house track about one hundred feet from where it exploded. I was blown 83 feet. I had the distance stepped off. I didn't step it off myself. I had a friend to do it. He didn't tell me it was 83 feet. I went with him. It was probably a month or so ago. It was in the daytime, three o'clock in the morning. It was dark then, pretty dark. It was not very cloudy. This accident occurred something like ten or eleven months ago. When I was struck I was at No. 3 switch and was blown across to what is called the scale track, blown across the track close to a telegraph pole. I didn't walk away that night. I suppose some one carried me away. I was told I was carried away from there across the scale track. I don't know of my own knowledge to what point I was blown. I couldn't swear to the spot, because I was picked up and carried away. I was knocked unconscious. I can't say how long before I regained consciousness. I don't remember the fact of being hurt or how it felt at the time. I know something struck me and that is the last I knew. Most certainly I can say where I was at the time. I said I heard the report. I heard the noise. I don't know that it made a loud report. I heard the noise. Steam got on me. I knew I was scalded and that was all. Scalded on the face and hands. It was hot water, if it had not been hot water it would not have scalded me. I have been in the hotel business since I got up, running the Southern hotel. It is doing a tolerably good business. I am making a good living and that is all.

27 Redirect examination:

I have been in the hotel business about seven months, I think. (Trial Jan. 25, 1894) I don't know just exactly. I had the assistance of my wife and family in running that business. I am making about expenses. I don't remember that the engine was working around there when it was not on that ground. We were pretty busy about the time this engine came in and one man always goes down to cut the engine off to the round-house. They were going to send this engine back on this fast freight and it was to leave at six o'clock in the morning, and it was waiting down there to be sent off on the morning train.

Recross-examination:

I don't know what time they fired up this engine No. 219; it was fired up at the time this explosion occurred at three o'clock in the

morning. I suppose the water was hot enough to scald me. I couldn't have been scalded by anything except water and I was scalded. It doesn't take much fire to have the water hot enough to scald a man. I can't tell you whether it is a very unusual thing to have up an engine, and have ready three hours before it goes out. I was a switchman in the yard. They generally have engines ready that long. I said the engine had come in an hour or two before its explosion. I have paid nearly ten dollars doctor's bills to one man and seven dollars to another. The ten dollars I paid to Dr. Stevens and the seven to Dr. Capps. That was not for the purpose of swearing in this case. I didn't pay Dr. Capps for the purpose of having his deposition taken in this case. I paid him for waiting on me. He is my family physician. He is not here but Dr. Stevens is here. It amounted to $70. I had another doctor, Dr. Fields. I owe Dr. Stevens fifty dollars and Dr. Capps twenty dollars, but some of this is for my family. I had the company's doctor; the reason I happened to have Dr. Stevens while Capps was my doctor, my friends suggested to call Dr. Stevens as he was an eminent surgeon and through their suggestion I got
28 him. I called him because he was a surgeon and they recommended him as a first-class physician.

Dr. E. D. CAPPS, testified by deposition as follows:

I am a doctor of medicine by profession. I have practiced medicine and surgery for about three years. I have had experience in treating nervous diseases and made a special study of them in the clinics and hospitals of New York, and have treated them ever since. I know the plaintiff and have had experience in treating such cases, and it has been general; have treated injuries of every description arising under this head. I was associated with Dr. Deall for years while he was surgeon for the railway company, and cases of every kind arising from accidents on railways came under my personal observation and treatment. I have examined plaintiff professionally, first about three weeks ago and again about three or four days ago. I examined him both times in my office, gave him a thorough examination; he was lame in the left leg, due to a dislocation of the hip from which he had suffered and he had an anesthesia, or numbness or dead feeling over the front of the right thigh extending from just below the groin down almost to the knee, said anesthesia was due to the diseased condition of the nerve roots from where they came out from the spinal chord; and with a strong probability of the trouble increasing; the examination was made by means of touch and electric battery, the latter was the most important test. I discovered the lameness in his left leg and the anesthesia or nerve in front of the right thigh; he limped on his left leg and complained of numbness or dead feeling in his right; I had noticed plaintiff limping for some time before I was called on to examine him, and tested him with a battery as to his nerve condition, and demonstrated the numbness or dead feeling did exist. He was afflicted with the lameness in the left leg arising from a dislocation and with anesthesia of the right leg extending

from the front of the thigh near the groin to the knee; this anesthesia was accompanied with a dead feeling or numb-
29 ness due to the disease of the nerve roots near exit from spinal column. In regard to the lameness of the left leg taken in connection with the statement of the physicians that he had a dislocation of the hip-joint, he will always be a great deal more liable to a repeated dislocation of said joint, and it is highly probable that he will never have as good use of the leg again as before the accident, and it is probable that the nerve trouble will increase instead of diminish; I think that the nervous trouble is due to some injury of the back and lameness in the leg could arise from a dislocation. I don't think he will ever have as good use of the left leg as he once had before the accident; I base this upon my examination and statement of physician who attended him at time of accident as to the dislocation, and the nervous trouble will increase instead of diminish and become gradually worse; I base this upon my examination of this particular case and my experience in treating similar cases.

E. D. CAPPS answers as follows on cross-examination:

I examined him twice, found no marks or bruises on his person. I base my opinion partly on what he told me but largely on my own personal examination; he complained of a dead feeling in his right leg, I did not take his word for it but applied the test that showed that it actually existed. In making a physical examination I pay but very little attention to what a person tells, but rely principally upon the condition I find. He had a good color; I don't know as to his appetite, or whether he attended to any business or not. I examined and treated plaintiff at his own instance.

WESLEY F. WHITE, testified by deposition as follows:

I was working as hostler in the Texas & Pacific yards at Fort Worth on the 19th day of Feb., 1893. Was a locomotive engineer and was engaged as hostler moving the engines in and around the yards and round-house of Texas & Pacific Company, Fort Worth, Texas. I know plaintiff and have known him three or four years; I know of the explosion that occurred in said yards on said
30 date; I was handling the engine that night and was the last man on her before the explosion, about fifteen minutes before the explosion I run said engine out of the round-house across the turn-table and down on to the wood track; I then left her and then went back to bring in an engine which had just come in from the west and was leaking badly; I had just had the fire knocked out of the last engine and got her in the round-house and was just putting the blocks under her when I heard the other engine explode; when I left the engine that exploded she had a small fire and it was banked; she then had about 120 pounds of steam on; as soon as she exploded I heard a man call for help and I run out to the scene of the explosion; I found one of the drivers of the engine blown off and about thirty or forty feet south of the engine; the engine was blown up pretty bad and scattered; it was dark

around there and I could not see much of it and when I came back next evening they had gathered it up and had it on the cars; I was kept busy moving engines the rest of the night. I was hostler and it became my duty to take her out of the house and put her on the wood track; about 20 minutes before the explosion I run her out on the turn-table and had some difficulty in getting her off as she had on so little steam; I opened up the fire a little and run her steam up to 120 pounds and then run her down on the wood track and banked her fire again and left to take charge on another engine. A similar engine to the one in question is registered and tested to withstand 200 pounds pressure, but it is generally operated at about 150 pounds pressure.

Witness WESLEY F. WHITE, testified by deposition as follows to cross-interrogatories:

Have been handling engines myself about 2½ year-; had fired engines before that about five or six years. I know what steam she had on about 15 minutes before the explosion, and I know the condition of her fire, and I know she could not have made much steam, if any, from that time until she exploded.

31 LEE BAUR testified by deposition as follows:

I was engaged as boiler-maker in Fort Worth & Denver City railway at Fort Worth, Texas, on, before and ever since February 19th, 1893. Have been boiler-maker fourteen years and four years prior to that as an apprentice to my trade. My experience has been general in building and repairing both locomotive and stationery engine boilers, but principally locomotive-engine boilers; I have worked in the shops of the Fort Worth & Denver City Railway and Texas & Pacific Railway Company and also the Fort Worth & Rio Grande Railway Company in the capacity of boiler-maker, I also worked a short time in the Fort Worth iron works. I don't know plaintiff, have never met him to my knowledge; I did not see the explosion that occurred on the morning of Feb. 19, 1893, but I saw the wrecked engine about four or five hours afterwards; it was lying in the Texas & Pacific yards at Fort Worth east of the round-house and near the wood pile; the engine was badly wrecked; one of the side sheets was lying about three hundred yards away, nearly south of the round-house and a little bit southwest from the engine; I found the water tank about forty feet from the engine and fire-box lying by the side of it; the fire-box had been blown against the water tank and it had knocked one of the supports of the water tank out from under it; by water tank I don't mean the tender of the engine, but the tank where the engines take on their supplies of water; I found the wagon top and one of the outside sheets lying a short distance south of the wreck, flattened out and the fire-box further off in the same direction; one of the driving wheels of the engine was blown off from its axle and was lying a short distance south of the wreck; the shell of the boiler was lying between the tracks, and very nearly the place where the engine stood when it exploded, and was upside down with the smokestack

sticking in the ground up to the shell. I looked at the side sheets and parts that had been blown off carefully, and I found that in the side sheets that had been blown off three hundred yards
32 a great part of the stay-bolts had been broken prior to the accident, some entirely and some partly broken and some fractured; I found the wagon top and outside sheet still hanging together but flattened out straight. I found the fire-box all right and a great many ends of the stay-bolts connecting it with the side sheets was still hanging in the box in a broken condition, and had been broken next the outside sheet; a great many of these bolts showed that they had been broken before the explosion. My experience has been general in boiler making and repairing, but the most of it has been on locomotive boilers; learned my trade in Texas & Pacific shops at Ft. Worth, Tex. I know the means used in repairing, testing, constructing and overhauling locomotive engines and boilers, and know it from experience and observation in repairing, testing, constructing, etc.; had about ten years' experience in the boiler-makers department in the railway shops, and repairing and testing boilers has been my work during that length of time. I can tell the difference between an old and a new break; an old break shows a corrosion and is dark on the part that is broken in two, a new break shows bright and you can see the new iron, and the older the break the more sediment and scales appear on it.

I examined said stay-bolts carefully as I wanted to see cause of the explosion and found them in a bad condition, fully three hundred of them showed old breaks of long standing, the broken parts were badly corroded and scaled; about the same number showed that they had been partly broken before the explosion, on these last bolts a part of the breaks appeared new, as having occurred in the explosion and the rest of the breaks looked old and corroded; the balance of the bolts showed new breaks, excepting them few that pulled through the sheet and were not broken; about one-third were entirely broken prior to explosion and about one-third were new breaks and were broken by said explosion; a great many of them were broken before the explosion. I can't state the exact time they had been broken, but the greater part of those show-
33 ing old breaks had been broken for several months, some of them nearly a year from the looks; I know it from the corroded and scaled condition of said bolts at the broken ends; I base my answers as to the time and number of broken and fractured bolts upon my examination of said bolts immediately after the explosion, and the experience I had in testing stay-bolts and taking out old and broken ones and putting in new ones. I found them broken, mostly broken in the two side sheets of the boiler. Stay-bolts in a locomotive engine stays the fire-box and side sheets from pulling apart and the outside sheets also stays the back, head and throat sheet to the fire-box; they have to resist the pressure of the steam and water in boiler, and they are used to replace such other stay-bolts that may be broken or fractured. There is a pressure or strain brought to bear on the surface parts by use of steam and is an outward pressure and is very great and varies according to the

amount of steam and the manner in which said steam is used, and it requires the great tensile strength in all parts of the surface portion, such as sheets, stay-bolts, etc., to resist it. Where there is a great number of the stay-bolts broken the effect would be to weaken the resisting power of said engine and render it very unsafe and unreliable; each stay-bolt has a resisting strength of its own and has to carry its part of the general pressure or strain, and when any bolt is broken it causes an additional strain on the other bolts remaining; this additional strain will become greater as more bolts are broken until the finally remaining bolts cannot resist it. On and before said 19th day of February, 1893, at Ft. Worth, Texas, the surface portions of steam-engines were strengthened by patching when needed or by putting on new braces when old ones were broken and by removing broken stay-bolts and putting in new ones. I have done, and seen these things done myself for at least fifteen years past. There were several tests used to detect broken stay-bolts at Fort Worth at said time, one of them is the hammer test, this is used by holding an iron bar on one end of the stay-bolts
34 and striking the other end three or four times with a hammer; if the bolt is broken it gives out a hollow sound, if it is not broken you can feel the resistance from the other end and the sound is clear and solid; this is the most usual test and is successful; there is also the water and hammer test, this is used by filling the boiler with water under a force pump, and while the pressure of the bolts is on, striking the bolts with a hammer, as under the hammer test; these are the tests most used and have used them myself. They could have used the hammer test and the hammer and water test, and if said tests were used the broken condition of said bolts would have been discovered. By stay-bolts is meant a bolt to stay the fire-box and side sheet apart, also the back head and throat sheet, and to resist the pressure of the steam and water on the surface of the boiler. The stay-bolts that showed old breaks were corroded and scaled upon the broken surface, said broken surfaces showed the action of the lime and alkali in the water. A thorough testing of an engine is putting every part of it under a close inspection; there is a great difference between an adequate test or general overhauling and casual examination; a casual examination is where a railway, by means of its employés being crowded in their work or otherwise, puts its engines out on the road without having all of its parts closely inspected. There may have been very few of the old breaks that occurred within forty days of the explosion but the most of them were of the longer standing, several months at least and some of them probably a year; I base this answer upon my experience with broken stay-bolts and the condition of said bolts, the amount of scale and corrosion on the broken surfaces of said bolts. If said engine had been tested in any accurate or thorough way within said time, that is, within from 25 to 40 days before the explosion, the broken condition of said bolts must have been discovered, if they tested it at all, there were so many old breaks and of such old standing that they could not

have possibly missed or overlooked them; and the corrosion
35 and sediment on the broken surfaces could not have accumulated in any forty days. Said engine, with broken stay-bolts in it, would be unsafe and weak in such parts as they were broken; I base my answer upon my knowledge of the power of steam and pressure brought to bear on said stay-bolts and my knowledge of the manner in which an engine is conducted.

LEE BAUR answers by deposition as follows, to cross-interrogatories:

I have testified in one other case and my answers therein were true and correct to the best of my knowledge and belief.

JOHN E. MARTIN testified by deposition as follows:

Am 31 years old. My occupation is general machinist, and was so employed at the round-house of the Texas & Pacific Railway Company at Fort Worth, Texas, at the time of the explosion of February 19th, 1893. I commenced the avocation as machinist in 1879, and have worked continually at that trade ever since, for a number of railroad companies; perhaps twenty or thirty in different States of the Union. I am not acquainted with the plaintiff in this suit. The explosion occurred about 2 a. m., February 19th, 1893, and I inspected the wreck of the locomotive engine which belonged to the Texas & Pacific Railway Company. The boiler, the dome sheet, the side sheet and the fire-box were blown out by the force of the explosion, which also turned the engine around and off of the track. The two drivers were blown off of the axle and the machinery badly shattered and damaged. The front end of the engine was turned toward the engine tender after the explosion. It was about 7.30 o'clock a. m. February 19th, 1893, at the ash pit near the Texas & Pacific round-house when I saw it. The rivets and braces were broken, and the stays-bolts were broken into pieces; some of the stay-bolts were broken previous to the explosion. There were some parts of the engine I did not see, part of the side and some sheets having been blown over two blocks away. I did ex-
36 amine the side sheet back head parts of the fire-box stay-bolts, rivets and braces, and found that about twenty-five of the stay-bolts in one part of the side sheet of the engine had been broken previous to the explosion, as a formation of sediment encrusted the ends of the bolts where broken, whereas, those broken by the shock of the explosion showed no such formation. There were quite a number of other stay-bolts scattered about, which were broken, that I did not stop to count. There were broken rivets lying about the scene which disclosed no incrustation, but which were broken by the sheer force of the explosion. I can distinguish between new and old breaks in the stay-bolts of a steam-railway engine. The stay-bolts hold together the side sheet of the fire-box and the fire-sheet of the boiler, and prevents them from spreading apart from the pressure of steam. A locomotive or steam-railway engine on the Texas & Pacific Railway Company is obliged to carry 140 or 150 pounds of steam as a maximum pressure to the square

inch, and this of course operates accordingly as a pressure on the side sheets, which are held together by the stay-bolts. The effect of the pressure is to spread the side sheets of the engine apart, unless properly secured by sound stay-bolts. The broken stay-bolts weakens the resistance of the boiler sheets by letting them spread apart and throws the strain on the rivets and sheet, which in some instances causes the sheet to give away. The boiler-maker of average mechanical ability could at the time referred to, and for many years prior thereto, detect the presence of broken stay-bolts by the sounding method or hammer test, which consisted in striking the stay-bolt on the end, the solid or hollow sound showing in the one case that it is perfect, or in the other that it is defective. The measure of resistance to the hammer will determine in most instances the condition of the bolts. I do not think that a steam-engine, in any part of which there were several broken stay-bolts, would, under the influence, force and pressure of steam be
37 strong and safe, for the reasons indicated in answers already given.

JOHN E. MARTIN answers as follows to cross-interrogatories:

I am not a stationary engineer, but a machinist. I do not inspect boilers. It is not a fact that I am not an experienced or practical boiler-maker. I assisted boiler-makers when I was an apprentice as a machinist, and am familiar with the manner and details of constructing a boiler. I have had no experience as an inspector of boilers. The judgment of such a man who is engaged as a boiler-maker or inspector of boilers, would be better than one that never had been engaged in that particular class of business. I am a machinist and not an engineer. It is necessary that they should be inspected at the end of each trip, when the boiler shows a leak, or when any other defect is manifest. A practical and experienced man would have discovered the imperfect condition of the stay-bolts a short time prior to the accident had he applied the test I have described, but of course if he discovered none, that would be the best evidence that none existed; at least, that none could be detected. I did not see all the rivets, but the most of them that came within the range of my observation were broken by the explosion. There was quite a crowd present. J. P. McCarty and Joe Nance were among the crowd. I made the examination upon my own accord, being interested in the machinery of a locomotive. The examination was not made at the request of any one.

JOHN MCFARLAND, for the plaintiff, testified:

I am a boiler-maker; have been employed as boiler-maker going on twenty years, in St. Louis, Little Rock, Pine Bluff, Fort Worth, and at Laredo, Texas. I have been working for some time past for the Fort Worth & Denver railroad, and am now boiler inspector. I have had much experience in building and repairing boilers. In my inspections I have to look over sometimes two or three engines a day and sometimes none, and sometimes different parts,
38 just as it is necessary to inspect them. I am not acquainted with the plaintiff; not to say acquainted with him. I am

acquainted with him now, too, since I came here to Dallas. I just got acquainted with him since I came here as a witness. I heard the report of this explosion. I then lived between four and six blocks from the explosion. I saw the engine about eight hours after the explosion. They were gathering up the remains when I got there. Large portions of the boiler were blown some distance. I can't state exactly the weight of the largest piece. It was over one thousand pounds. The boiler blew about 125 feet from the engine. Another part of it, a piece weighing about 300 pounds, blew about two and a half blocks, or about two blocks from the engine. When I got there they were gathering up pieces; gathering up the machine. I examined the engine after that explosion. I saw defects. I didn't go to see the engine with a view to see what caused the explosion. I observed that the stay-bolts were broken; about 150 altogether. All the stay-bolts in the boiler were broken by this explosion, and 150 were broken prior to the explosion and a great many of them fractured; and those that were not broken, were pulled through the sheet.

You can't find out the exact time of the breaks. I can estimate or approximate the age of the breaks from the general appearance. The age of those breaks, those old breaks, my approximation was all the way from one month to nine months; that is, all the stay-bolts, the 150 bolts, broken or cracked before the explosion. The old breaks commenced at the bottom of the boiler, next to the mud ring, and were broken five rows up. (Witness draws a diagram and explains it to the jury as follows:) This part of the boiler was blown fifty or seventy feet from the engine. One of the side sheets attached to this was blown over the coal chute two blocks away. These stay-bolts here run all the way down to the bottom. All of these here were broken. These rows above here seemed to be sound and solid bolts. The principal break was down here. When
39 the pressure came on they just opened them out and turned them flat. When the stay-bolts were broken they had nothing to hold them. When one side bolt blows out, or is cracked or broken, the balance of the bolts have more pressure to contend with. It increases the pressure upon the balance. I didn't count all the stay-bolts broken. I found five rows of bolts on both sides broken. An engine should never have not less than fifteen in a row, no way. I never counted the bolts, but counted the number of rows of bolts broken.

The ordinary method in Fort Worth of testing an engine to determine whether these bolts are sound or not is with a hammer and the water test, and if necessary the drill test. With the hammer test, you go into the boiler with a hammer and have a man outside with a sledge or heavy bar which he holds against the bolt outside; you take a little hammer and tap the bolt from the inside and you can tell from the sound of that bolt whether it is in good condition or not. Sometimes you meet with a fractured bolt, a bolt partly broken, and if it bears right close to the sheet you can't tell by the sound about it; in that case, you fill the bottom of the boiler with water and put on about 150 pounds pressure with the force-pump,

and if the bolt is weak with this amount of pressure on it, when you strike the bolt it gives way and makes a report like a firecracker. Sometimes the formation of the bolt carries it right close to the sheet on the side and you can't tell by the sound, because it makes a solid sound and then you take a drill and bore this out and put a light in the boiler and you can see the next bolt. In this way you get the broken stay-bolts out. By the application of these tests it could be discovered that these bolts were broken in this engine. Some of these stay-bolts were pulled through the sheets. According to my judgment this indicates that they were not put in properly.

Cross-examination:

This diagram I have drawn and explained to the jury represents the boiler as it stands in the boiler shop. It represents
40 it all except those stay-bolts below and those supposed to be broken. These are supposed to be a row of bolts broken in the engine. This represents one side here, but the bolts are supposed to be broken on both sides. These represent the left-hand side of the boiler. I should judge the left-hand side was blown about two blocks. I don't exactly know how many feet or yards. Don't know exactly how many yards in a block. That was an ordinary-sized block. That would be the width of two blocks and a 60-feet street between. This was the left-hand side. The right side was connected with a wagon top and it was lying flat between 50 and 75 feet from the scene of the explosion, the wagon top. The wagon top and one side sheet was blown about 50 or 75 feet. It was the wagon top that was straightened out. It was only a portion of the side sheet and that has no circle in it. That part of the boiler called the wagon top was straightened out. This was blown on the right-hand side. There was about the same number of bolts broken on the left-hand side as on the right-hand side. I am as positive of this as any other thing I have sworn in this case. The whole length of the fire-box of the boiler. This part of the boiler called the front cylinder ring and this the middle cylinder ring, and this front sheet resting on the track and the back part of the boiler was torn asunder. These bolts were broken all the way from one month to nine months. I cannot say how many were broken one month before. I could hardly state how many, what proportion. I can't state that unless I examine the boiler and test it. I can't state how many were broken two months before. If I had the bolts here to examine I could tell you how many were broken two months before. I can say that some of those bolts were broken as much as three months before the explosion. Between 55 and 60 on each side of the boiler had been broken about three months; that is, between 55 and 60 of those on each side with a complete severance. I can't say how many were broken within six months nor how many within nine months. I tell the jury
41 that they had been broken from one to nine months by the way they looked in the boiler. That is caused by incrustations on the ends of the bolts. It is not exactly like throwing your

knife out in the rain and letting it rust. It takes a different length of time for scale and incrustation to form and rust to form. The difference between a scale that it takes three months to form and one that it takes six months to form, the six months' scale is very hard and the three months' is not quite so hard. I examined those to see if they formed six months before. I felt of them. I examined over one hundred. I did not examine the other fifty. It is not a common term among boiler-makers that when a stay-bolt is cracked they call it checked. They generally call it fracture. About two-fifths of the whole number in the boiler were fractured. I didn't know how many were in the boiler. I don't know whether there were nine hundred in that boiler or not. I don't know the size of the boiler. I saw the sheet there. I could not tell by that unless I measured it. I say there should not be less than fifteen stay-bolts per row. I don't know how deep that fire-box was. I did not see the broken inside of the fire-box. The stay-bolts in the fire-box were pulled through. I can't form any correct idea of how many stay-bolts were in there. I just calculated two-fifths of them were broken. It is not very broad guessing, not very much guessing. I counted them some. I believe seven railroads are running into Forth Worth. I can't state what the common tests are on the railroads except the road I am on. I never worked on the Santa Fe. I don't know what tests the Rock Island uses. The M., K. & T. does not do any testing there at Fort Worth. If they have any testing done they have it done at either Alvarado or at Denison. I don't know any test except that used in the Fort Worth & Denver. When I say water test I mean hydraulic pressure. We put on the water and the pump and put on 150 pounds. I use that test every time I give the boiler a local test. I never test stay-bolts unless I make the pressure. I always use hydraulic pressure. The
42 Union Pacific uses the drill test and the hydraulic test both. Whenever they give the engines a general test they always do. I don't know what they use on the Pennsylvania. I never was on that road. I don't know about the New York Central, nor the Chicago & Alton. I don't know what any other road uses except the Fort Worth & Denver. When I am satisfied they are tolerably sound I don't always use it. If the fracture or crack does not extend to the center of the bolt it gives a solid sound. It may be fractured and you cannot tell it by the hammer test, but I don't want to run any risk about that. The hammer test does not satisfy the master mechanic. It is not used as a general test by all the roads in the country. If a man is called out to test it they put some man on it and he might say, "Yes, it is all right, let her go." I would not go by the sound altogether. I do not consider the water test absolutely safe.

Q. Do you consider the drill test absolutely safe, so that you can be sure an explosion will not occur?

A. There is no such thing as you are talking about.

You can test a bolt so that you will know that the bolt is entirely safe. The U. P. and the Southern Pacific use the hydraulic test; they use the drill test too. I do not know whether they use

it on all their engines or not. That is the Southern Pacific that runs around by El Paso. They use the drill process now.

Redirect examination:

On those bolts a great many of them were bad fractures, some were past the center and some were one-fourth. Those broken past the center, they give out a sound generally like a broken bolt.

Recross-examination:

I can tell by the sound that they are fractured past the center. The drill test, you drill about a three-eighths hole up in the bolt and you put a water power on and if that bolt is fractured in any way it will leak. The hydraulic test is where you use a force-pump.

43 Examined by the court:

When you fill it up with water and put 160 pounds pressure on, that is called a water test. Where you take a drill and drill a three-eighths hole in the bolt and let it run that way and as soon as the bolt breaks it will leak, and you can tell by the leak where the fractured bolt is, that is the drill test. If the water is running out I make up my mind that the bolt is broken. The U. P. when they put on a fire-box they drill a safety hole in each bolt turned out by the U. P. and as soon as the bolt breaks or cracks to that hole in it, the water will leak out, the pressure forces the water and steam out of these holes and in that way you can tell just as soon as the bolt breaks.

Recross-examination continued:

The hole drilled in there shows for itself. We don't use a drill every time we make an inspection. You must not drill a great big hole. You drill the hole past the sheet, one sheet, and you should not drill it bigger than five-sixteenths of an inch.

S. O. Bissett testified by deposition as follows:

My age is 43 years. I am a machinist and an engineer and have been for twenty-five years. Have known plaintiff by sight about 18 months but not intimately; I know that an engine exploded in the Texas & Pacific yards on the morning of February 19th, 1893; I went to the explosion about four or five hours after it occurred; saw fragments of what was once an engine lying scattered around on the ground before they had been moved; engine was lying a little east of front of the round-house, forty or fifty feet from it; saw cylinder part of the boiler lying bottom upwards on the track; saw dome and wagon top lying twelve or fifteen steps to the right of the track, it was lying with inside part of shell up and spread out; the inside shell of fire-box and flue sheet was lying a few steps further against the frame of the water tank; parts of the frame and wheels

were scattered around the vicinity generally; saw a monitor
44 injector about fifty yards south of it; saw the outside sheet of fire-box in the back yard of a residence about a hundred and twenty-five yards distance, also saw a piece of the running board lying west of north about fifty or sixty yards, and other small fragments scattered around promiscuously.

It was in a very sad condition, badly torn up; in the piece of the sheet that I saw in the residence I counted 155 or 160 stay-bolts that were broken off, of which the majority showed old breaks long prior to the explosion; I also noticed on the inner shell that lay at the base of the tank quite a number of stay-bolts that showed old breaks, but did not count them; I also noticed in the wagon top and dome some long stay-bolts and that some of them showed old breaks, but the majority of them appeared to be fresh breaks; I also saw a great many stay-bolts in different places that showed old cracks partly broken off but not entirely; I also noticed several rivets that were old breaks around the boiler-head seam.

I served three years and nine months as an apprentice in the machine shops of the L. & N., Clarksville, Tenn., and worked for railroads in Tennessee, Arkansas and Texas for several years; for more than twenty years. I am acquainted with the manner of constructing, repairing and testing engines and boilers by many years of practical experience and observation. When I examined the engine after the explosion I found that at least 50 per cent. of the stay-bolts had been broken before the accident, and some rivets sheared off; very few of the rivets showed old breaks; the sheets themselves were in good shape and of fine material, and the only reason I could discover for the explosion or defect in the boiler was in the fact that so many of the stay-bolts and rivets had been allowed to remain in it in a broken condition. It is very easy to distinguish between new and old breaks in stay-bolts, fresh breaks show the bright, clean end of the iron and old breaks show the rusted and corroded end of the iron. There were about 98 per cent. of the stay-bolts broken; some few had pulled out of the opposite sheet; did not count all of the broken ones;
45 but about 50 per cent. showed old breaks occurring prior to explosion; about 48 per cent. were broken by the explosion, the remainder pulled out of opposite sheets. I found them broken between the inner and outer side sheets of the fire-box; a few long ones in the dome sheet and few rivets sheared off in the boiler head. Stay-bolts are placed in the boiler to strengthen or stay the sheets and to resist a pressure in an opposite direction. And are used in the construction, maintenance and repair of engines and they are to assist the boiler sheets in resisting the pressure on them; in repairing they are used to replace others that may have been broken or cracked. They frequently break or wear out; sudden expansion and contraction of the sheets will break them, different waters have a tendency to eat and corrode them; sudden cooling of an engine or blowing out while hot and filling with cool water while hot has a tendency to contract and when fired up again will expand the sheets in a manner that will frequently cause them to give away, it

also has a tendency to kill the life of the iron so that it would not be as strong as it had been before. The force of the steam has a pressure upon the surface portions of the steam boiler and this varies in accordance with the amount of steam used. If from $\frac{1}{8}$ to $\frac{1}{2}$ the stay-bolts in a steam-engine are broken their effect upon the engine would depend upon the location or manner in which they are broken; if they were broken alternately throughout the boiler it would weaken it one-third or one-half, as the case might be; if they were broken as in the engine we are describing, it would weaken it seventy or seventy-five per cent. If any number of stay-bolts are broken, that condition has the effect of reducing the resisting power of the boiler and sheets and render it less safe. The surface can be strengthened by adding more and heavier stay-bolts and removing the broken ones. There were in and before Feb. 19, 1893, among engineers, machinists and inspectors, ways of detecting broken stay-
bolts, considered the most reliable test is what is known as
46 the hammer test, by placing a heavy hammer on one end of
the bolts and striking it on the other end, if the bolt is solid it causes a rebound of the hammer, if broken it will not; another test is the straight-edge and another test is the hydraulic pressure. A stay-bolt means a bolt staying the inner and outer sheets together. Sheared rivets means those cut by sheets or between sheets, sheared rivets have a tendency to weaken the boiler; this would be regulated according to the seams they are sheared in. An engine with several broken rivets and several broken stay-bolts would not be a strong and safe engine because every bolt and every rivet has its portion of the strain to stand, and every bolt broken weakens it just so much; the more bolts broken the weaker it becomes.

S. O. Bissett testified as follows, by deposition, on cross-examination:

I fill both capacities as a railroad and stationary engineer; I am not a boiler inspector by profession, but have had experience in inspection of boilers. I am not a boiler-maker by trade, but have worked on them. It is a fact that men who have been engaged in inspecting and making boilers have a better knowledge of the way they could be tested or constructed than one who has never been engaged in that particular class of business; it would be prudent to inspect engines and boilers once every three or four months. The proper inspection is the best evidence that there are no broken bolts, if upon such inspection no broken ones are found.

Dr. H. C. Stevens, for the plaintiff, testified:

I am a practicing physician, a graduate of a medical college. I am the county physician of Tarrant county. I know the plaintiff, and have been called professionally to see him. I was called to see him last spring (1893) and I found him suffering mostly with his back and hips, and some bruises on the head. I saw hime some two or three weeks after he was hurt, after that. I understood that
he had been treated by other physicians before I saw him. It
47 was only a few days after the hurt that I was called in, but
I do not know just how long. I do not know just the date

when he was hurt, but I think probably two weeks after the hurt I was called in. I examined him carefully, and thought it was a spinal injury, and I directed most of my examination to his back and spine. He seemed to suffer a great deal, and was unable to stand up on his feet at the time, or at least, he said he could not, and I tried to get him up, but could not do so. To determine his condition I tried electricity and various other things. As to the cause of his lameness, my opinion at the time was that it was produced by some depression or pressure upon the spinal chord, maybe a blood clot. I could not tell whether it was a blood clot or fracture. These brain and spinal troubles are shown by symptoms very obscure. I think there were signs or indications of leision. That deadness of the limbs is called anæsthesia. It is a nervous trouble of course. I was trying to find out what was the matter. Under proper treatment a person may gradually be relieved of it, but I do not know. It is very hard to say as to the permanency of the injury. I should think there was some probability of the injury being permanent. Some of the nerves being injured that would tend to disable him for life. After I saw him I suppose I attended him occasionally for a couple of months, but not regularly all the time. I do not remember exactly, though, maybe not so long. He was on crutches some time, but I do not remember how long. I last treated him some time in the summer, but I saw him two or three weeks ago.

Cross-examination:

I did not say I saw evidence of leision about the spinal column, but I said that perhaps there was some. Judging from the symptoms I thought there was some leision. I thought there was injury to the spinal column. That did not result from the curvature of the spine. I said I thought there might be a blood clot. That can be remedied by surgical operation. I did not say there was
48 any curvature of the spine. As to whether there is a permanent injury, that is hard to answer. These nervous diseases are very obscure, and it is hard for a man to tell anything about them, as to their permanency, that is. It is a good deal like brain diseases. It is almost the same thing. They are occult to a large extent.

Redirect examination:

The immediate effects of that injury were not strictly anæsthesia, but more like partial paralysis. Not being able to stand up and suffering a good deal of pain, these symptoms are somewhat alike. This anæsthesia is more *is more* recent, this deadness of the limbs. He was not suffering so much at the time I saw him with this particular symptom of anæsthesia. Permanency means forever, I suppose, and it is hard to answer whether it would be an indication of its permanency if he suffered with it ten months. My opinion, I said I thought it might produce trouble hereafter probably. It is very hard to answer that question, because those spinal diseases are very obscure.

Recross-examination:

I did not consider it was anæsthesia in the beginning. It was more like partial paralysis then.

D. W. McCULLUM, for the plaintiff, testified:

I am an engineer and machinist; I commenced that vocation in 1870, and have followed it ever since. I am acquainted with the plaintiff in this suit, but I did not know him until a few days ago. I remember the fact of an explosion taking place some time in February, 1893, on the T. & P. road at Fort Worth. I made a careful examination of that boiler after its explosion. I learned my business when I was in the marine service, where the engineers were required to have a perfect knowledge of testing boilers, and how boilers should be constructed. I was an engineer in the United States marine service. I had to be examined before I took charge of an engine, and every engine had to be inspected and examined before taking charge of it and using it. I have been in that
49 business for 23 years off and on, but I have been following it since 1870 all the time.

I was on the ground about 30 minutes, or about 20 minutes, after the explosion. I lived about 200 yards from it, I judge. The explosion of this boiler called me out. I did not hear the explosion. I was asleep, but I woke up shortly afterwards and went right down there. I made an examination of the boiler after I got down there. I saw the engine several times before the explosion, but I never examined it. I do not know its condition then. I saw those stay-bolts on the engine after the explosion. Their appearance showed that they were broken before the explosion. From their appearance when I saw them I should say 160 were broken before the explosion. About 80 came through the piece that flew over my house. There were 160 in that piece that came over my house. I mean 160 were broken before the explosion, and there were 80 in that sheet. Those were all old breaks that I mentioned. I saw evidence of new breaks, breaks caused by the explosion. From my experience as an engineer, the age of those breaks was from three months to about twelve months. I judge the age of the breaks by the form of the corrosion on the surface of the fracture. The older the fracture the thicker the corrosion grows. It is not a fact that where a stay-bolt is broken in a boiler, that that part of the corrosion, by which I judge the age of a break, can be formed within a few weeks or days or months; it takes time. The longer the time the thicker the sheet of corrosion grows. It cannot form in a day or two. I think from the indications of the corrosion some of the bolts were broken as far back as a year. From three months to a year they were all broken back prior to the explosion, because the fractures I examined were just such, they had just such evidence to prove that the breaks were prior to the explosion of the boiler. I can tell by the formation of the corrosion that they were broken from three to twelve months prior to the explosion. The principal way of in-

specting and testing these boilers is by hydraulic pressure;
50 that is, by water, pumping water in there and water pressure. There is a practical way of testing with a hammer, what is called the sound test, or hammer test, but it is not reliable. From my knowledge of the character of those bolts in that engine, both broken and cracked ones, I could say that they could have been discovered by inspection prior to that explosion. On the 19th of February, 1893, there were tests known to engineers in Fort Worth by which these things could be tested, tests known and applied by machinists in Fort Worth to determine whether bolts were broken in an engine or not. They were the hydraulic-pressure test, the drill and the sound test with the hammer, but I do not consider the sound test reliable. They use it to ascertain the condition of the bolts, whether they are broken or not. When they are broken they make a different sound than when they are not broken, if they are not joined together. When the bolts are cold and the iron around them is cold they press together and contract, and they sound pretty much like those that are not broken; for this reason sound testing is not reliable. They make the sound test and the drill test, and if this does not discover the break then they put the hydraulic pressure on, and this proves all things about it. This pressure is the last test; it is reliable; it is just the same as if you were in doubt about the weight of anything, you put it on the scale and weigh it. The drill test is to see if there is any fracture in the bolt, and if so, as soon as you strike the fracture it will leak. It is an indication of it being out of order. If you drill that hole in the bolt, and if the bolt is sound, of course the water pressure has no effect; if it is sound it don't leak. If it is cracked it will leak at once; that is a perfect test.

Cross-examined:

I never knew this plaintiff until a few days ago, not until I got acquainted with him after this explosion. I gave my deposition in this case several months ago. I knew some one represent-
51 ing him then. I served in the United States marine from 1875 to 1880, on Lake Huron and Michigan, engineer on a tug. I got my training in London; I was born in London. I know as much about this business as anybody that practices it, because I have studied it, and I am up with the age. I have worked for the Chicago & Grand Trunk, New Orleans & Northwestern, Fort Worth and Denver, and some roads over in Mexico, and another road. I do not work for any railroad company now. It has been about two years since I worked for any railroad.

I found the side sheets over in my yard. There were 160 broken bolts in that side sheet. Then I found 80 in the throat sheet. I did not count them, but by the way they were broken I judge they corresponded with the sheet in the yard, but I did not count the others. The explosion occurred about 3 o'clock in the morning, just before daylight. I counted these bolts about 7 o'clock next morning. Mr. Bissett was with me at the time. He is *how* dead. I say 160 old breaks had been there from three to twelve months. About twenty-

five per cent. of them had been there about three months. I cannot tell exactly how many of them had been there four months, but I guess the latest breaks, about 25 per cent. of them, had been there about three months. Those that had been there four months I suppose would average on up to the number; maybe about one-third more of them in four months. Of course, I cannot give the exact estimate. My best estimate, I judge, 25 per cent. of them were broken three months back. I cannot exactly say how many were broken five months before; maybe one-fourth. I will say twenty-five per cent. of the breaks will be as far back as three months, and I will say the first breaks will be about twelve months back. You have got the outside and inside, and you can judge of the middle ones yourself. I can tell by the corrosion how many were broken as far back as three months. I can just say that some of them were broken as far back as twelve months, and some three months. The
52 marks on the three months' corrosion is a scale of corrosion, and the mark or sign on the twelve months' corrosion is a scale. The longer it stays there the thicker it grows. As to whether it grows thicker from three months to 4, 5, 6, 7, 8, 9 and 10 months, there are no figures on it. It just grows thicker. That is the best I can do.

In Fort Worth I live on the south side of the railroad -rack there. I think it was the left-hand side of the engine that blew towards my house. That engine was fronting east after the explosion. While it was standing on the track, just before the explosion, it was fronting east. I live on the south side of the track. That would make the right side of the engine towards me. How it happened the left side of the engine blew towards my house, I expect it was broken off that way and twisted around, or just as the next explosion happened it broke off above there and twisted around some way. I saw the other side. The throat sheet was still attached to the boiler. Eighty bolts were broken in that. They had been broken from three to twelve months. I cannot say how many of them had been broken twelve months.

The hydraulic pressure is the best test. That is an *an* exact test. If the bolt is fractured only a quarter of the way through, the drill would not touch the fracture, is the reason I told Mr. Simpkins the drill test would be absolutely sure. The drill test is not as sure as the hydraulic test. To apply that you pump in enough water to reach the desired temperature, that which you want to put in the boiler. If you are going to carry 150 pounds, you would put in 300 pounds pressure, double the quantity of the pressure you generally carry. To pump in 300 pounds pressure in a boiler that carries 150 pounds, would not break it all to pieces. It would not be unsafe. It is owing to the pressure you want to carry. If I just carried 150 pounds, I would pump 300 pounds pressure. I have seen that done on steamboats in London and elsewhere. If I was going to carry 180 pounds, I would put in — pounds pressure. If I was going to carry 200 pounds I would put
53 in 400 pounds pressure. I have seen that done in the United States on the C., B. & Q. I have never seen it done in Texas.

I never saw it used. I don't know as I ever heard of it being used in Texas. I do not know that it is not used on railroads in Texas. I never saw it used. I never saw it. I say the hammer test is not reliable. That hammer test is common on roads in Texas. It is so common that nobody but unqualified people adopt it. It may be so that superintendents of railroads all over this country, from Maine to Florida, adopt this test, but I have seen men do very green things in the science of mechanism. I have seen men getting thousands of dollars per year that would do some mighty green things. When it comes to mechanical facts they do not understand their business.

Redirect examination:

My experience is that the water test is the best. There is no way to tell by the hammer test, except by the sound. As a general thing when a stay-bolt breaks it is caused by the pressure in the boiler, and the expansion when hot first pulls the weak parts apart, and as soon as the boiler cools off again the parts come back in contact again by contraction, and then the sound of the hammer will indicate that the bolt is sound perhaps, when it is not sound. This test does very well for a rivet but not for a stay-bolt, because the rivet will rattle if it is fractured and a stay-bolt will not. In using the hammer test, if a bolt has been broken for some time, it does not always indicate it. If the bolt is slightly fractured the sound will not indicate the fracture. If it is solid together, if it is together it will not. If they are solid together, the ends resting together, it will not indicate it; that is, if the bolt is broken into and the ends do not rest solidly together, the sound will indicate it; but if the ends rest solidly together, it will not indicate it by the sound that it is broken. If the piece is sprung so the bolt don't come together it will rattle, but when the strain is off they will spring back together. If the pieces come together solidly, it will not sound like it is broken, even if it is broken. But if
54 the ends do not come together, then the sound of the lick will indicate it is broken.

Recross-examination:

Of course, if it is joined together, the pieces resting together, the indication will be just like a solid bolt. When we test by the hammer test the fire-box is empty, and the inspector gets inside with his hammer, and a man stays outside with an iron bar or hammer, holding it against the end of the bolt. There is nothing on the inside then. If there is a complete severance of the two parts of the bolt; if the two ends are joined solidly, or rested solidly together, it will sound solid. In a bell that is cracked, the clapper striking it, you hear a cracked or rattling sound, but a stay-bolt is not like a bell. To make the drill test, we drill clean through; that is what we call the drill test. Some don't drill clean through, and some do; but on the C., B. & Q. they drill clean through. They put in a hollow bolt from the beginning. That is

a test. That is not the kind of bolt they use. On the L. & N. they drill a hole about two inches. That is called a drill test. Some make the whole about one-sixteenth, and some one-eighteenth. It is a very small hole. None of them make a half-inch hole. None use a five-sixteenth hole. It would be very dangerous to use a five-sixteenth hole.

Plaintiff rested.

JOSEPH POTTON, for the defendant, testified:

I am master mechanic on the Rio Grande division of T. & P. R'y. I have filled that position about two years. I have been in the service of the Texas & Pacific railway about seventeen years, in the capacities of foreman of the machine shop at Marshall, and foreman in the round-house at Bonham, and round-house at Texarkana. Prior to my engaging in the service of the T. & P. railway I had experience in the railroad business on the Pennsylvania railway and West Philadelphia; in New York on the N. Y. Central and others. I filled the position of machinist on all these roads; about six years in Pennsylvania, and about
55 two years on the N. Y. Central. My duties as master mechanic on the Rio Grande division of the T. & P. road, I supervise the work in the motive-power department from Fort Worth to El Paso. I just have charge of all the different stock and cars on the motive-power department and car department. In my experience as a railroad man I have familiarized myself with the construction of steam-engines; that is my business. I am familiar with the construction of locomotive engines and steam-engines. I am familiar with the means necessary to keep engines in good repair and condition. I know what a stay-bolt is. It binds the inside and outside sheets together of the engine and strengthens it. The inside sheet is part of the fire-box. The fire-box is longer than it is wide. Some are circular, but the sides are straight, except the offset. These stay-bolts connect the fire-box or inside sheet with the outside shell and boiler. The outside sheets conform to the inside of the fire-box until it makes the circle of the boiler. There is a space of 4 or 4½ inches between the fire-box and the outside sheet, but they vary in width. The stay-bolt runs in that space. This space in there is full of water. The water that fills that space is contained in the tank of the engine and that space is filled through the injector, which is an instrument to force water into the boiler, and it has the same action as a pump. I knew engine 219, on the T. & P., that exploded on February 19, 1893. That engine was manufactured by the Baldwin locomotive works in Philadelphia, Pennsylvania. The engines made by that company are considered the best in the United States. I cannot say to what extent the engines manufactured by those works are used by railways in this country. I think it is a well-known fact that they construct more locomotives than any other company. Their engines are considered of first-class workmanship and construction. I was in the service of the Texas & Pacific when engine 219 was first purchased. I first saw said engine at Texarkana. It was then a new engine. It had just

arrived at Texarkana when I first saw it. It was in first-
56 class condition then. I do not know when it was purchased.
It arrived in Texarkana the 2nd day of December, 1890. It had not been used before that time, only in the works. It was tested at Texarkana. They have a system there where they put all the parts together and try them; that is they test the engines before they run them. I mean they block it up in the shop and run it like you run a stationary engine. This was done in December, 1890. The boiler of No. 219 was made of Otis steel. It is considered one of the best metals for the construction of boilers. I did not examine to see positively whether engine 219 had any test stamped on it from the Baldwin works. They all have test stamps. That test stamp shows the date the boiler was constructed, the amount of steam it is guaranteed to carry and also the cold-water test. This one was tested with the cold-water test. I am familiar on the roads I have worked on, with the tests in common use on the railways of the United States for ascertaining the condition of the stay-bolts. From that I have read and seen and heard, and from my general knowledge and information, the hammer test is the one most universally used. That is where one man is placed on the outside of the boiler with a large iron bar which he holds against the end of the bolt, and another man goes inside of the boiler with a smaller hammer, with which he hits the end of the bolt, and by the sound the lick makes he can tell distinctly which bolt is broken. As long as the hammer which the boiler-maker uses, rebounds from the bolt, and has a ring in it, which the boiler-makers are familiar with, they are certain that the bolt is all right and not broken. If a bolt is severed they can detect it; it is very easy to detect it by the hammer test. We detect it by the sound and the rebound of the hammer. The sound a broken bolt emits is different from the sound of a bolt if it is not broken. It is hollow, like hitting the end of a drum. If it is solid it rings and rebounds, but hollow and dull when broken. If it is partially broken, we call it in railroad parlance "checked." I don't think a man in the
country could ascertain a checked bolt that the crack does
57 not run to the center. There is no way to ascertain. The hydraulic test would not detect it. It would be better than a broken bolt. I have only known on- road to use the hydraulic test in the United States. The hammer test is the test used by almost all roads. The hammer test is regarded by railroad companies as a safe test. It is universally adopted in the country. I do not know any railroad that does not use it. There is no such thing as a drill test. Some master mechanics have adopted a method of drilling and putting pressure through a bolt, about one inch or an inch and a quarter, so they get the hole deep enough so the inside sheet, that is—I can explain it better than I can illustrate it. (Witness draws a diagram.) This represents the sheet shell of the boiler. This small hole is drilled so it goes on the inside of this sheet. This is the outside of the sheet. Here is where the water is. I have seen very few of these holes in the United States. It is not in common use, but I have done it myself. If the break should

occur in the bolt below the place where it is drilled, the drill would not have any effect in detecting the break, unless it is drilled by the broken one. If it is drilled somewhere else it will not detect it. I mean a drill like this. The main cause that is attributed to a boiler explosion is from excessive pressure from low water. Supposing a boiler having a steam pressure of 120 pounds, and there were 250 or 300 broken stay-bolts, some in the right-hand side sheet and some in the left-hand side sheet, some in the throat sheet, in my judgment the effect of the pressure upon those broken bolts, the broken stay-bolts would bunch together and it would be more likely to bulge the sheet, and the water would escape in the fire-box and it would relieve itself. Speaking of pulling the side bolts through; that don't account for it—that is not evidence of insufficient fastening of the stay-bolts. I account for it in this way: The inside sheet being exposed to the fire, the sheet is softened, and the bolt pulls through the inside sheet. In other words, the sheet pulls away from the bolt. The pressure would be instantly relieved. On my ar-
58 rival at Fort Worth last night I looked into the boiler of an engine of the same mode of construction as 219, with reference to ascertaining the number of stay-bolts in it. I counted the number of stay-bolts in the right-side sheet, the left-side sheet, the throat sheet and the back sheet too; I found 709 bolts altogether. I examined engine No. 223. (Refers to memorandum.) No. 223 was manufactured by the Baldwin locomotive works, and it is exactly the same pattern of 219, and exactly the same size. Number of stay-bolts in throat sheet 52; number in right-side sheet 268; number in left-side sheet 268; number in back sheet 121; total 709.

Of the engine that had exploded I noticed there was a part of the right-side sheet found in the yard south of the round-house. It was the lower part of right-side sheet. Found in the yard there. There were 195 stay-bolts in that. I arrived at Fort Worth at 6.05 in the evening. The explosion occurred at 3.10 in the morning, I think. It was dark when I got there. The parts of the wreck were loaded on some cars when I got there. I could not inspect them then.

Cross-examined:

I am supervisor of mechanics on the Rio Grande division, and my jurisdiction is from Fort Worth to El Paso. This engine was under my particular jurisdiction when it was in Fort Worth. When it was out of Fort Worth it was not in my jurisdiction. I do not know when it arrived at Fort Worth. This engine was from the Baldwin locomotive works. I do not know how it was bought. I do not have anything to do with buying them. I do not know what they gave for them. I suppose twenty-five engines were bought about the same time. I cannot say that the company gave $5,000 apiece for them. I do not know how those engines were bought. It is not my business to know. The distance between the outer and inner sheet varies. It was about four inches in this engine; I will not say positively, as I have not measured it in this engine. It was not my duty to inspect stay-bolts. I have not inspected

59 stay-bolts. My knowledge is from the knowledge of mechanics. I have men experienced that do it, and I have stood by the side of them while they were doing it. That is part of my duty. I don't know whether I ever stood by this 219 engine and saw or heard it tested. We had thirty-five engines of this class. I have stood by the side of them and seen some of them tested. I saw this engine when it came to Texarkana. I saw it tested there. It was shipped there and put by pieces and tested. I saw it tested. The hammer test is the ordinary test used by mechanics and railroads generally; if a bolt is broken it will tell, but if the bolt is cracked it will not tell. I don't think it will tell if the bolt is cracked beyond the center. If the fracture opens only to the center you cannot tell. If it was drilled it would leak through the hole. If it was cracked through to the center it would not be detected by the hammer unless it had a hollow stay-bolt. A hammer by sound will not tell anything about it on a straight bar. The drill test is not known among boiler-makers. Boiler-makers used a tubular bolt for this drill test 25 years ago, and have abandoned them; some roads use a few of them yet. If the bolts are tubular the water will not leak out so it will tell, unless it goes through. If the crack goes to the drilled hole, it will leak through, it will show itself. It would show when they were using it. A boiler explosion is not always from excessive pressure, and it is not always the weakest point that gives away. When we say low water we mean the water is low, and cold water is being admitted in the boiler, and that causes the explosion. I mean by constant expansion and contraction—the weakest part in ordinary pressure would give away first.

When we find a number of bolts give away that pull away from the inside boiler sheet and relieves the pressure that is the boiler opening. When you find pieces falling 200 feet away, that is the boiler bursting. The inspecting officer on the T. & P. road is the boiler-maker at inspecting points. We have what they call a traveling engineer. It is not his duty to inspect the boiler.

60 We do not have a traveling inspector, not termed that way. The traveling engineer travels over the road, rides on the engines and sees about how they work and sees about needed repairs, etc., travels over the road to see how the engines are performing their work. We have a regular weekly inspection of boilers, whenever we catch them. We have a regular weekly inspection of stay-bolts on my division, but I cannot answer for the other. I don't remember whether we were doing much business at that time of the year. I cannot state positively how much business we were doing at that time of the year, the early spring of 1893. I do not know who operated this engine that night, I don't remember. I do not know that Wm. Harris was on it a short time before it exploded. They have a man by that name on the Eastern division. That is where this engine came from.

Redirect examination:

This engine No. 219 was to be inspected at Longview, that is not

in my division. Mr. Lovett was general foreman at Longview Junction.

C. W. DEITS, for the defendant, testified as follows:

I am a railroad man. I work for the T. & P. I am general foreman at Fort Worth. I have been in the business since 1873. I have worked in the shop, fired locomotives, was traveling engineer and general foreman. As general foreman of Fort Worth on the 19th of February, 1893, my duties were supervising the work and seeing that the engines have the work done on them, and reported on time, and looking after them in the shops and seeing about the hostlers.

I remember No. 219 which exploded in the yard in February, 1893. At the time of the explosion I was in bed. I did not look at my watch and I do not remember how long after the occurrence before I arrived at the scene of the explosion. My father called me and I got up and went down in probably thirty or forty minutes.

61 I made an examination of the right outside sheet of that boiler. There were ten or eleven old bolts showing old breaks in that right side sheet, that side sheet was in the yard of a widow by the name of Rudicil. I believe McCullum boarded there at the time. I found just nine old broken bolts in the left side sheet. I did not notice any more old breaks anywhere else. I found nine old breaks in the left side sheet and ten in the right. The distinction between an old break from a recent break is, the old ones are coated over. After a break occurs, a complete severance and separation of the parts, you are not able to say how long it has been broken. It is hard to say. I do not know whether anybody can say. It is according to what water you use how long it takes to become encrusted. Some water corrodes more than others. I do not know how many days. Those are matters of opinion, and of course one man's opinion would be as good as another one's. I do not know whether you can tell whether one has been that way one month's duration or two months or six or nine months. I know I cannot tell. I would not swear to it. I might get out with a man and argue with him about it, but when it comes to swearing about it, I would not do it. Some water will corrode one-quarter of an inch in eight or nine months, and where there is different water in other places it will run two, three or four years and have nothing like corrosion on it. I have had occasion recently to go inside of a boiler of the same mode and construction as 219, with a view of ascertaining the number of stay-bolts in the right and left side sheet and in the back and throat sheet. I had occasion this morning. The engine I went in was the same class of engine as 219, same manufacture. I found fifty-two bolts in the throat sheet. In the left side sheet I believe there were 268, and in the right side sheet the same number, and in the back sheet 121. Part of the side sheet fell in the yard of some man over there. There were 195 bolts in that part blown over there, the outside sheet that fell in this yard. My observation of the new or fresh

breaks produced by the explosion, there were quite a few
62 checked bolts in that side sheet. I mean by checked bolts cracked bolts that are not parted; probably one-eighth of an inch or a sixteenth. I mean it has a crack, but is not entirely broken, and then we call it checked. I examined that sheet the next morning. The balance of it was examined that day, February 19th, but I did not go over that sheet until the next day and then I had a man to bring the sheet over. There were quite a few new breaks. It looked as if the bolts had been cut off. I am familiar with the tests used for the purpose of ascertaining the condition of stay-bolts, only on the T. & P. From my knowledge and opinion as a railway man and from reading journals and my conversation with skilled men in this line of business I am able to say that the method generally is the hammer test. If you use the hydraulic test you would — to take the hammer anyway. It takes the hammer or sound test anyway. The Fort Worth & Denver use the hydraulic test, but I don't know this as I never saw them use it. I do not know of any of the other roads using it. The test we use is the hammer test. I do not know what ths other roads use. Some roads use the pressure on the boiler. Some put pressure on when they take them out of the shop. Before they put the boiler on the frame they go to work and put the hydraulic pressure on. My opinion upon this subject is the hammer test is the best, but some of them drill a hole in the bolt. The H. & T. C. in Fort Worth use the drill test. I don't know whether they drill the bolt when it is first put in or drill it afterwards, but I notice that the H. & T. C. drills when they put in new fire-boxes. I do not know of any other railroad coming into Fort Worth that uses the drill. I believe there are six or seven roads coming into Fort Worth. The three branches of the T. & P. are separate lines but it is one system.

Cross-examination:

I do not know if 120 or 150 pounds pressure of steam was put on
an engine that would be the pressure that each stay-bolt
63 would have to bear in the engine. I cannot make the calculation as an expert. Some of these bolts are not the same distance apart. Supposing they were the same distance, 265 on the side, with 120 pounds of steam, I cannot answer what would be the pressure each stay-bolt would have to bear. I have been in this business since 1873. I never built an engine. I never built a boiler. I am not a boiler inspector. It is my duty to have them tested. I did not test the bolts on this engine. I do not know exactly how long that engine has been running to Fort Worth, but about two years. I may vary five or six months. I do not know what time in the afternoon it came into Fort Worth that day.

The hammer test is used by the T. & P. It is generally known that the hydraulic test is more certain than the hammer test. If you put hydraulic pressure on, and the bolt is cracked, it will separate. If the bolt is broken the hammer will certainly tell it. A man cannot tell that a bolt is fractured unless it gives way. I

know what pressure is used in testing some engines. That class of engines; they are marked 180 pounds. That is water. They are marked on the engines "water." I don't know if you put 180 pounds pressure in there and the bolt is broken or cracked it will give away. Maybe it would. It is used to press the sheets apart, so they will pull away from the bolt if it is broken. You could not tell it unless it pulled the bolts apart. It depends upon how much it is broken. If it is broken one-half I expect it would pull apart. I don't know, though; that depends upon the size of the bolt. I do not know in the case of a seven-eighths bolt. I cannot say. If they ruin a bolt they cut the hole a sixteenth larger in drilling the hole out. I have found a bolt cracked sometimes, but you would not find it unless you cut in there to see it. You have to cut in there four inches to find out whether it is cracked, if the crack is that far off. When you use this water pressure I suppose it will break if it is cracked, if you put enough pressure upon it. If the bolt gets cracked and the crack goes to the hole in the bolt of course it will leak, and that is the purpose of the
64 drill test. Whenever they are cracked to the hole the water comes out without the pressure. The water will come out all right enough. It will always come out unless the hole is corroded up. If the hole is stopped up by rust or corrosion, of course it will take a little pressure. If the drill test is used and the bolt is cracked to the hole, the water will come out. That is a pretty good way to tell that it is cracked to the hole. I did not count the bolts in the piece that was blown over in the yard. I did not make any notation of broken ones in that one. All of them were old cracks that I claim as checked bolts as being cracked. You could not tell how long they had been cracked. I do not think they were cracked by the explosion. The H. & T. C. is the only road I know running into Fort Worth that uses the drill test.

Wells reached Fort Worth on the 20th on No. 3. It was due at 8.30 or 8.35, but I do not know whether the train was on time that day or not. That was the morning train. I did not telegraph to him. He arrived there 29 or 30 hours, I presume, after the bursting of the engine. I do not remember exactly whether we were doing much business at that time. In February we are not generally rushed, but I do not remember how we were fixed then. We were not rushing engines out and in all the time for the freight business. Business was slack. I believe Engineer Sample was the last engineer on that engine. He brought the engine in that morning, but of course some one else might have got on the engine after he got in. Wm. Harris ran that engine.

Redirect examination:

At the time the point of inspection of engine 219 was at Longview Junction. Mr. Lovett was foreman over there, but I do not know whether they call him inspector of engines or not—Geo. M. Lovett. On inspection we take the old stay-bolt out and screw in a new one a sixteenth of an inch larger. Unless the other one is worn out, or

something of that kind; of course we have to go an eighth or a sixteenth larger.

65 Examined by court:

You can produce an explosion of a boiler by overpressure, or the engine being short of water. On a locomotive boiler you can get overpressure on the parts, and if you put cold water on a hot sheet, or even hot water on a hot sheet, that will cause an explosion. Either hot or cold water may produce an explosion if the water is off of the crown sheet. The water is all around the fire-box, and if you get the water off of the crown sheet and the crown sheet gets dry and hot, and then if you put water in there, of course you will cause an explosion sometimes, and then an over amount of pressure may produce an explosion. A man may have the engine built to carry 160 pounds, say of steam, and you may get 300 pounds on and that is overpressure. There is only one way for it to get out, and that is by safety valves. If you had the fire in there it would keep making steam all the time, and it would get higher and higher all the time; if you did not let it off by the safety valves. One way is by heat putting on too much steam and not letting it escape, and the other is by letting the water get too low on the crown sheet. Both of these means are calculated to produce an explosion. Take an A1 engine and boiler and you can explode it. Fill her full of water and put a big fire in her and put the blower on and let her go; she will give way at some point. If she don't blow the fire-box out, the dome cap or something, she will give way somewhere. She will relieve herself some way. You can blow a sheet out of her. The crown sheet can come down. It can be done by pressure. Take an A1 boiler and you can explode it with the hot crown sheet I just told you about.

Redirect examination continued:

I do not know how long this engine had been standing there only what the men told me.

Recross-examination:

We have not a pop-cock on that engine. We call it a pop-valve. There is a dome cap on top of the dome, and in that you
66 bore a hole and screw a piece of brass in it, and then you take a valve and set it down in there and grind it and get it the right bevel and it is put in there to relieve the pressure. We put two of them on. That is what we call a safety valve. We put a spring in that too. The steam forces this valve up and the steam escapes. When the steam is high enough or presses hard enough against the valve it opens the valve and then the steam escapes, but when the steam gets low again and gets exhausted the valve closes back again by this spring. If the pop-valve was in good condition so as to relieve the engine, the engine could explode then from the water on the crown sheet. It will not explode then unless you put

water in it. The water makes an expansive gas which expands and forces things out, and it will explode unless it is relieved.

CHARLES M. WELLS, for the defendant, testified:

I live in Marshall, Texas. Am foreman of the boiler-makers there. The T. & P. general shops are located at Marshall for the whole line. There are no other shops as large as those in Texas. I don't think there are any in the State as large as those at Marshall. Freight cars and some passenger cars are manufactured in that shop. We manufacture parts of engines, if an engine becomes disabled we put it in good condition and mount it. I have been in that business about 25 years. In the boiler departments and railway service I have been an apprentice boy, journeyman and foreman. I have been foreman for the same boiler works for over 20 years, that is, I went there over 20 years ago. I went with the T. & P. as foreman 20 years ago, in June, 1874. I worked with the T. & P. awhile and went from there to the Santa Fé general shops at Galveston, and was there eight years as foreman of the boiler-makers, and then I went to the Mexican National, and was there a few months as foreman. Then I went to a branch of the Southern Pacific in California and worked in the same capacity there, and then returned to the T. & P. at Marshall some two years and some months ago. I am familiar with
67 the construction of a locomotive engine in all of its parts, particularly with the boiler; that is my special business. From observation and experience I am familiar with the other parts too. I was in Fort Worth the day after the explosion, and if I remember right the explosion was on Sunday morning, and I got there on Monday morning. I went there for the purpose of examining the portions of the exploded engine. I examined the condition of engine No. 219 and its boiler. I noticed the right side sheet of that boiler. The right outside sheet of the fire-box was blown away from the boiler, and laid across the street, it went across the street in a lot in which there was a small house and it was in the yard of that house. I did not measure how far it was from the place where it occurred, but I judge it was 300 feet. The left side sheet remained with damaged portions of the boiler, and that had been picked up by the wrecker and placed on the car. Almost the entire wreck was on the car. Some small portions of it was lying about the yard, and this sheet I mentioned, across the road. I examined the left side sheet as to the condition of the stay-bolts. I am able to state whether a break of a stay-bolt on the surface is old or new. On the right side sheet there were about ten bolts that had been broken before the explosion, that is, entirely broken. I can't say how long they have been broken. The end of a broken stay-bolt becomes incrusted, and in the contraction and expansion of the engine they will part a little, and that motion will remove the scale, and no great amount of scale can accumulate; and all the scale that accumulates in 24 hours will be cracked off, although the bolt will be discolored and that will indicate that it was cracked before the explosion, but no living man could tell how long it had

been cracked. If the bolt was broken for some time you cannot tell how long it has been broken. I examined the left side of the sheet. I saw some bolts entirely broken off. About as many as on the right-hand side of the sheet. Nine or ten on the left side sheet
68 that remained connected with the inside of the fire-box, but if I remember distinctly they were on the corner, left corner, left end, that were broken previous to the explosion. They to show that the break had taken place before the explosion, but I could not tell. There were a great many stay-bolts in both side sheets that were cracked, that is, partly broken. There was a little ring around some of them, one-sixteenth of an inch. A good many of those bolts were broken off after the explosion, appeared to be knocked off. That side remained in that yard till Monday at ten or eleven o'clock. Some of the bolts were sticking up in that position. In that position in the side sheet. They had still strength enough in them to pull from the inside of the fire-box. They were fractured before the explosion, but in this fractured condition they had still strength enough to be stronger that the opposite bolts. They pulled through out of the hot plates. After a rupture takes place there is a continuation of the rupture. That pulling through does not indicate an insufficiency of holding. It was caused by the shock. When an explosion takes place it will rend most anything after it starts. An explosion is started by a rupture, and after the rupture starts it will tear anything asunder. I examined the throat sheet. There was not a single bolt entirely broken in the throat sheet, but a good many of them were checked. Some checked down to $\frac{1}{16}$ of an inch, but the center of the checked bolts remained firm in all I observed. This checked condition weakens the bolt to a certain extent, but these bolts that were checked and pulled out of the fire-box showed that they were still in their weakened condition stronger than the opposite bolts that were not checked. All boiler-makers put in bolts that have been used in some pipe or boiler. They use them over. All boiler-makers use checked bolts over. These were put in that way. There are many causes for the explosion of an engine. Insufficiency of water is one thing. Say a boiler is in perfect condition, and from some cause or other or by neglect there was not sufficient water in it to
69 protect the plates exposed to the fire. When those plates become bare or nearly so, the steam becomes very much heated, very expansive, and this sometimes causes an explosion. Sometimes if the plates are very hot and dry, and somebody should introduce feed-water into them, or cold water on them, the cold water entering a hot boiler will cause a sudden contraction of the metal, and that will produce a rupture. The rupture may relieve the pressure though and not blow up the boiler. We do not have boilers that will burst but will not explode. By a rupture the pressure is quickly lowered and if it is done quickly enough it will prevent an explosion, but should there be a succession of ruptures the explosion may be caused. In other words all explosions are produced by ruptures, but all ruptures will not explode a boiler. The most common cause for an explosion, if the boiler is in good

condition, is by introducing feed-water into the boiler with the plates exposed to the fire and not protected by water on the other side. There are more explosions caused by this than any other way.

Examined by the court:

Introducing feed-water in the boiler where there is not sufficient water to cover the exposed plates, the feed-water coming suddenly into contact with the exposed plate will cause a contract of the plate, and the water will generate steam so rapidly that it will produce a shock and explosion sometimes. There are other causes such as defective plate, corrosion. Corrosion of plates, also neglect and mismanagement. I mean by mismanagement the party having charge of the boiler neglecting it. Sometimes incompetent men handle boilers, in want of knowledge. High pressure of steam or letting in of feed-water would cause explosions. It would be mismanagement of the men in charge to introduce feed-water into the boiler when in this condition.

Examined by counsel:

I am pretty well informed of the improved method in use among railroads in the United States for testing stay-bolts and engines. The most general and universal method by boiler-makers is the hammer test. The hammer test is done by having the helper to hold a bar or sledge to one end of the bolt and the boiler-maker taps the bolt on the other end. It is also done without a helper. A competent man can tell by striking just one end of the bolt without anybody holding anything to the other end. This system is in vogue on the Pennsylvania Central, where the inspector tests the bolts by hammering on one end alone. He gets the sound. If he is a trained inspector his ears are educated to this sound just as a man would be in picking a harp, if he was in that business. The system in use in Texas is the hammer test. By sounding the bolt with a helper on the outside. The helper can tell by the sound, if he is experienced in it, just the same as the inspector could. In the hydraulic test some put 180 pounds pressure and some a little more. A three-hundred-pound pressure would be wrong. The boiler would stand it perhaps all right, but I never put on more than 20 or 30 pounds above the amount marked for the engine to stand. It might stand 300 pounds and it might explode afterwards too. There is no such thing as a drill test. Some makers put stay-bolts in the boilers and drill a small hole in the bolt to the depth of $\frac{3}{4}$ of an inch. These are called "tell-tale" bolts, and if that bolt breaks to the center it will leak and give warning, but unless that bolt breaks to the center, there is no "tell-tale" about it. If a boiler-maker wants to drill into a bolt to tell whether it is broken or not he is incompetent. The hammer test with the assistance of a helper is the best. I do not know of any drill test at all. I know there is a tell-tale stay-bolt. Sometimes they drill in one-fourth of an inch and sometimes three-sixteenths of an inch, and sometimes a bolt may break to the drilled

hole while out on the road and interfere with the steam of the engine, and if they cannot get behind it and plug it up they have to give up the train and let the engine die unless they can get some plug in until they get to the shop and have the bolt removed. If the hole is large they may plug it. Sometimes the steam will
71 blow out of those holes and a good deal of water may be wasted, and I have known them to make a train die, and I have known them to be that way until they got the train in. There is a disadvantage to the engine by the hydraulic pressure. The boiler is in a very different condition when you are giving it the hydraulic test than it is when it is in working order. The hydraulic test is with cold water, and everything is cold and rigid and it may rend the boiler and you may not detect it at the time. When the boiler is running on the road it is hot, and the metal is more pliant and more apt to give way when hot than cold, if it has been strained by overpressure. Some give the hydraulic test by putting hot water in, but it is most generally by cold water. There is no way to detect a checked bolt as long as $\frac{3}{4}$ of the bolt remains solid, and the center is solid, there is no hammer test or drill test that would develop that. That is because you sound the center. The center is the highest part of a bolt on the outside of a bolt. And the helper holds his hammer on the highest part of the head, and the boiler-maker hits the other end, and as long as that bolt is checked to not more than to the center it will give a solid sound. The hammer test is universally used by the railroads. All stay-bolts found broken on the T. & P. are removed at once. We test them regularly in Marshall, and we put a new stay-bolt in at once when one is found broken. Say a stay-bolt $\frac{1}{8}$ of an inch in diameter we take that out and we insert a new one a sixteenth larger. In removing a stay-bolt you enlarge the hole some in tapping it out for drilling, and you have to put in a larger one to fit the opening made tight, and you generally have to make the hole about one-sixteenth larger. Then you put in a larger bolt by about one-sixteenth, which is a stronger and better bolt. If 250 or 350 of the stay-bolts of an engine were broken and there was 120 pounds of steam to the square inch, the sheets would bulge out and it necessarily would part, unless there is a bolt that would strip out a hole or two to relieve itself, to relieve the pressure. If there were
72 ten good bolts joining they would strip good bolts out of the sheet, that is, bolts that are not entirely broken off, and that would relieve the pressure. That solid bolts joining the broken bolt would strip out the sheet, and then each hole would serve as a safety valve and relieve the pressure on the boiler very quickly. It would be safety against explosion. Stay-bolts are made out of special iron, "stay-bolt iron." In other words, a $\frac{1}{2}$-inch stay-bolt has an area of about $\frac{47}{100}$ square inches and the tensile or breaking strength of this stay-iron was 60,000 to 65,000 pounds per square inch. The tensile or breaking strength of a $\frac{1}{2}$-inch stay-bolt would be about 28,000 or 29,000 pounds. In practice we use the factor "6" as a safety working strain; then $\frac{1}{6}$ of the breaking strain would be about 4,500 pounds. As the working pressure allowed upon

this class of engines was 150 pounds per square inch, and the stay-bolts were located 4½ inches apart the flat surface that one bolt would have to support would be a square 4½ inches, equal to about 20 square inches. The allowable pressure being 150 pounds per square inch, the total load on each bolt would be 20 multiplied by 150 which equals 3,000 pounds, much stronger than the safe limit allowed by all practical rules governing the construction of steam boilers. In that class of engines they are 4½ inches between sections. We use the factor six for safety and a load put on that bolt will not exceed one-sixth of the breaking strain, which would be about one-sixth of 29,000 about. Each bolt would have to support a square plate 4½ inches by 4½, or about 20 square inches one bolt would have to support. The bolts in engine 219 were made of very good metal. I took some of these bolts with me to Marshall and tested them, and broke them in two and compared it with some stay-bolt iron we had there, and we could not tell precisely whether they were from the same metal or not. Our new bolts are Tennessee stay-bolt iron and it is identically the same metal as the stay-bolts taken out of 219. For that reason I believe it to be Tennessee stay-bolt iron. 150 pounds of steam means 150 pounds to the square inch. Each stay-bolt will have to support 20
73 square inches; 150 pounds to the square inch would be twenty times 150 or 3,000. I never examined engine 219 personally. I have men in charge there, and experienced boiler-makers to do the testing. I have 15 to 20 boiler-makers and blacksmiths and other hands, but it is always one of the oldest and most experienced men that does this testing. I have general supervision over him while it is done and I frequently am by him while testing. I can tell by the sound whether the bolt is broken or not. The last inspection of engine 219 in our shops was in June, 1892. It was sent to Marshall to be overhauled and we had it in the shop about three weeks, and all stay-bolts were examined then, and none were found broken. It was in good condition. Stay-bolts break quite frequently. When we find any broken they are replaced. That is why these tests are made from time to time. They do not break every day. I examined this engine. I do not examine them personally. Prior to June, 1892, I believe this engine was examined in November previous, in 1891, and found no bolts broken. At that time engine ran out of Longview back through Marshall but did not stop. It belonged to the Longview district, and I had no opportunity to examine it until it came to Marshall for repairs. In 1891, the first examination showed no bolts broken, and the second showed no bolts broken but the usual examination would take place at Longview, after this would. Then it was probably examined once a month, and they were examined as often as we could get an inspector at them. I believe it is necessary to make three examinations per year; once every four months, I think would be safe, unless you know that the engine has been in a wreck or something.

Cross-examination:

The break of a stay-bolt throws an extra load on the next bolt. With 150 pounds pressure to the square inch, the pressure on each bolt is about something like 3,000, and as a break occurs it distributes that 3,000 pounds among all other bolts. There is
74 upon a locomotive the means whereby the pressure of steam escapes, but they are tampered with in a great many cases. We have relief valves to relieve the pressure upon the locomotive when the pressure should arrive at a certain point. Those relief valves go off when the steam reaches 150 pounds. That is what they are set at. When it reaches that point it goes off, if not tampered with. I do not know the condition of that one. If it reached 150 pounds pressure the pop might relieve it but steam might have accumulated faster than the pop could relieve it. The pop would go off, whether it relieved it or not. When it goes off it makes a noise, and people can hear it around in the neighborhood.

The next thing is, when there is too little water, when they let the water get down on the crown sheet and it gets dry, and the introduction of feed-water in there. If they did not introduce the feed-water, the fact of the water getting off of the crown sheet would not burst it. If they did not introduce the feed-water the effect would be to sag the iron down and get it red hot. When they turn cold water on that red-hot iron or dry iron, it would give loose at the weakest point. If it bursts the burst will not be in the crown sheet itself. This red-hot iron would be the weakest point in the boiler. If the engine is all right elsewhere it would not necessarily give way where that hot iron is. That might be the weakest point, but cold water might not strike that point. The red-hot iron would be the weakest point, and maybe she ought to burst there.

I have stated that there were three ways of bursting a boiler, namely: the want of sufficient water and the introduction of feed-water onto the hot plates by an expansive pressure of steam. Introducing cold water generates an enormous amount of steam and it runs the pressure up a good deal higher than it should be, and if the steam goes up, very likely the pop has to go off. If it did go off the neighbors surrounding that engine would hear it, maybe, if
75 they were awake. If ten bolts are broken the tendency would be for the good bolts to pull through. They will pull through when an explosion takes place, no matter what care is taken in putting them in. They would not tend to pull through an expansion or explosion. The bolts pulling out would relieve the pressure, but a good bolt will not pull out under ordinary circumstances. The ordinary test is the hammer test, and if a stay-bolt is broken any competent man will detect that break. With reference to fractures, I have stated that a man has never reached that degree of competency where he can tell by the hammer test the extent of the fracture. Of those fractures in those stay-bolts none that I saw passed the center. I made a very thorough examination. I did

see those in the throat sheet. Some were knocked off on the side sheet but not on the throat sheet. I remained at that engine from 10 o'clock in the morning till late in the afternoon. I saw it on the wrecker and afterwards in Marshall. I have that throat sheet yet. I have not the side sheet, that went the course of all scraps. From November, 1891, to June, 1892, that engine was out of my district. It has not been in my district from June, 1892, up to the present time. June, 1892, it was in the shops for general overhauling and after it was overhauled it remained in our district awhile and then went to the western district and it remained there until about three weeks before the explosion, and then came back to our district. The last test I gave it was in June, 1892. I consider it very safe to examine an engine about three times a year.

GEORGE M. LOVETT, for the defendant, testified:

I reside at Longview; I am general foreman of the T. & P. at Longview Junction. I have occupied that position over three and a half years. Have been in the railway service since the 22d day of February, 1876. I have worked at the bench as a machinist and ran engines for four years and four months, and have acted as foreman at Longview Junction for two years and seven months, and night foreman at the round-house for seven or eight months. Was foreman of the motive power at —— river during the construc-
76 tion of that bridge, etc. In February, 1893, I had general supervision of handling motive power and working and running trains and getting engines ready to get the trains out. I had general supervision of the men. With reference to inspecting engine it was my duty to have that done, and also to see that it was done. In February, 1893, I knew engine 219 that belonged to the T. & P. She was running at that time out of Marshall, on what we call the Denver run. She had been running there at that time between three and four weeks, that is, three or four weeks before that time, I mean three or four weeks before February 19th, before she left there. Anterior to that time she had been running out of Longview Junction, between Longview and Texarkana, and Longview and Fort Worth. There was in the service of the company a man under me, who did this inspecting. His name was R. Stevenson. I employed him about three or four months before that time. I considered him a first-class man, a competent man. I observed his work and thought he was a competent man, and understood his business; he was the man that inspected all the stay-bolts in her. The report now handed me is in my handwriting, I made it out myself. I based this upon the list Stevenson gave me. It was made out on a telegraph form, from a pad. I destroyed it after making out this list from it. Every one of the others are mine. These reports run back from December 25th, 1892, then comes January 1st and then January 8th and 15th and 22nd, 1893, these are weekly reports.

I don't know where Stevenson lives now, I have not heard of him but once, he was there. That was last summer, when a night machinist of mine died, his brother-in-law came in from Michigan. I

have tried to find him lately. Those sheets were made out correctly by me. The mode of inspecting stay-bolts was what we called the hammer test at Longview at that time. That is done by a machinist getting inside of the fire-box and a helper stay outside with a bar, and he holds this bar on the outside of the fire-
77 box on the bolt while the boiler-maker inside strikes the bolt on the other end from three to five blows, and the only way you have to test it that way is by the sound. That is regarded as a safe test, I consider it the only really safe test that we have. The hydraulic-pressure test is very good, but it will only show you the weak parts. If you put the pressure on the boiler you might stop a few pounds of the giving-away place, and when you put the steam on it might give away because you did not go far enough. There is no such thing as a drill test, I never heard of it. I have heard of drilled bolts; they are very good. These holes are drilled in the bolts, and if the bolt becomes cracked to the hole the water will escape, and it just shows you that you have gotten a broken bolt. I consider them a detriment, because they cause delay and they admit too much cold air upon the fire, and they are a detriment in getting steam. Nobody has been able to get a proper percentage out of coal that is conversant with this subject, even under the best circumstances, and to get as much as they can they have to admit air, but there is such a thing as admitting too much air. Those little stay-bolts admits too much air, and it is a great loss. In case one of the bolts should break they might not be able to get at her to plug her on the inside, and you might have to hang up the engine on account of the escape of steam or admitting too much air. It might cause delay or loss. The only advantage in the drilled stay-bolt at all is that if it is broken it will show, that is, if the break goes far enough into the break to get to the hole. Those drilled stay-bolts are used but very little. Of course they do use the drill test, but it is not generally used. The hammer test is the only proper mode I know of. If in inspecting a stay-bolt we find it to be in a bad condition, broken or cracked, or any defect ascertained, we take it out at once. Drill it out and take it out and put in a new one. As a general thing we put more in than is weakened. That is, if we find one or two broken or a half a dozen broken, we take these out and put the new ones in, and go one or two more to
78 make sure we have taken enough of them out. We have to drill out the bolt and drill out the hole a little larger to get a good solid side, and this necessarily makes the hole bigger, and we put in a bigger bolt. I do not know how long after a stay-bolt has been partly broken before it will break. I never observed that particularly. Nobody can tell how long an encrusted stay-bolt has been there after the crust has once formed. It will form in one trip or maybe two or three days. Within that time there will be enough on there so you cannot tell how long it has been broken. When Stevenson was in my employ I noticed his work every day. I noticed him because I was compelled to watch him. That is, I was compelled to watch all the men every day. I did this for my own interest. To keep my job in the first place, and if I did not watch

the men to see if the work goes on properly there might be some fault to find. I don't think there was a day but what I observed my men at work, from a half dozen to a dozen times. Stevenson was a good workman.

Cross-examined:

It was my duty to watch around among them. It was not my duty to do any work, but I did sometimes. I employed Stevenson. I cannot say that I was there on the first occasion of his inspecting this engine. I did not say that I was there on that occasion, but I had been there. I knew he did it from the general knowledge of what has been his duties there every day. I do not know exactly how long Stevenson stayed with me, four or five months, I suppose. I do not — where he went. I do not know where he came from. In the hydraulic test you might go to a certain point and not go far enough. If the engine carries 150 pounds of steam that would be a good test. I might put more than 150 pounds. The hydraulic method would not be a good test because if I put it up to 180 pounds and one more would burst it, I might not have put it high enough for the test. We test an engine more than it is gauged to carry, because we always want them to carry more pressure than they are guaranteed to carry. My instructions are to see that the men
79 carry out my instructions. If a bolt is cracked or fractured on our road we call it checked. With 160 pounds pressure on and the bolts are tapped with the hammer they will not give away unless they are pretty badly cracked. This pressure will not tend to strain or pull it apart. Under this pressure and under the tap of the hammer I believe you could tell whether the bolt is broken or checked, as well as you could simply with the hammer and no pressure. I never heard of the drill test. A stay-bolt resists about 20 square inches. I am not familiar with boiler construction to tell you how many pounds. My duty is to straighten these rods and have them so they will resist all pressure, but not to resist all power.

Redirect examination:

I inspect these boilers to see that the stay-bolts are not broken, we do inspect them, not to see that they will resist anything; this is done by the boiler-maker. I went to Fort Worth at the time this explosion occurred. I saw engine 219 on the car after the explosion. I did not make any examination. Suppose there were ten bolts broken on one side and ten on the other, actually broken by a fresh break, and there was 120 pounds of steam to the square inch; I didn't think there would be any probability of an explosion. I have noticed engines come in with stay-bolt broken. I have noticed 75 or 80 broken. Broken stay-bolts are not a very common thing.

E. W. HAYES, for the defendant, testified:

I reside in Fort Worth; occupation, master mechanic, Fort Worth and Denver City Railway Company. Have held that position two

years. My experience in railway business, twenty-five years, have been fireman, engineer, foreman and master mechanic. Am fairly well acquainted with the construction of the boiler of a locomotive steam-engine. A master mechanic has general supervision extending to steam-engines operated on the road. I am acquainted with the various methods in use on railways in the country for testing stay-bolts in an engine. The hammer test is the common
80 and general test, striking with a hammer on one side of the stay-bolt and holding a sledge on the other. I *I* know about the drill test, but I do not use it on the Fort Worth & Denver. We now have on the Denver road thirty-four engines. Three of them have drilled bolts. Of the three engines with drilled bolts, only one of them has been to Fort Worth; the others stop at Clarendon. The one that stops at Fort Worth is No. 25. There is a man named McFarland in the service of our road. He is under me. I should say he has not inspected No. 25. He inspects engines, though.

We sometimes drill the solid stay-bolts. It is a matter of opinion testing stay-bolts with the hammer, with or without pressure. It must be in some cases that pressure is not beneficial, but in others it is. I think the drill test deadens the sound; the actual sound that might be got by striking the bolt without the pressure. The object I would have in supplying the pressure would be to separate the sheets on the bolt. That would be the object in using the water pressure by those that do use it, but I think the water pressure deadens the sound that might be otherwise gotten by striking the bolt with no pressure. The hammer test is more generally used than the other, or either of the others. I know of no other test. Drilling the bolt weakens its strength. Say we have a bolt fastened through a piece of iron four or five inches deep, or long, and it is driven in there, and we sometimes want to move that, and he cannot drive it out, and we drill a hole in it, and that weakens it. They were made to fit the sides of the hole, and we drill it out, and that will weaken that particular bolt. We remove that much of the metal in drilling it out, depending upon the size of the hole we drill. It is a matter of mathematical calculation. A hole five-sixteenths would weaken it materially. It would not be safe.

Cross-examined:

A bolt has to resist the vapor and has to resist vibration. The fire-box is a double box; an outside and an inside sheet, connected together with stay-bolts. The sheets only vibrate sometimes.
81 They vibrate when expansion and contraction takes place. It is not expanding and contracting all the time when there is fire in it. When a fire is made in the engine the inside sheet expands first, and when it expands the outside sheet is steady. That would be going on all the time if you fired her up all the time, but you only fire her up when you get her ready for service. Our engines are pretty much all the time in use. We fire up an engine five times a week, possibly. That is pretty good vibration. Fire and heat on the surface inside, and a cold surface outside, have a tendency to wrench these bolts, I should think.

It requires pretty careful investigation to get at the cause of these breaks. The hammer test is the one ordinarily in use. The hydraulic test does not show you that the stay-bolt is broken. Suppose you force into an engine 150 pounds of steam to the square inch, and those bolts are cracked, you can tell it much more easily by the hydraulic test than the hammer test. Where all the parts of the bolts fit in just as it was before, in my opinion you could tell better by the pressure. The hammer test, with the pressure also, is the better test. This water test, with the hammer test, is more satisfactory than the other test. I do not think McFarland has inspected engine No. 20. The Fort Worth & Denver was a part of the Union Pacific system. Whether than "Union Pacific road" test was adopted generally by the Union Pacific or not I cannot say, but it is not imperative, I know. I cannot say whether or not model engines on the U. P. have that tubular stay-bolt. (Witness was then shown a cut entitled, "Model engine" of the Union Pacific road, in a book entitled, "National Car & Locomotive Builder.") That cut of the "Model engine" has got the tubular bolt.

Redirect examination:

The Fort Worth & Denver is in the hands of a receiver, and is disconnected with the Union Pacific since that time; since the night of the 23d of October. It has been running its own engines since that time. McFarland has been working for the Fort
82 Worth & Denver since that time. I do not know of any other engines on that road now running with these stay-bolts. There may be. I do not drill bolts because I think it weakens them, and that vibration that has been described leads to the hole, and we have a fractured stay-bolt where we could not have it if it was solid. There are no means of detecting a fractured or checked stay-bolt when it was not severed that I know of.

Recross-examination by plaintiff:

It is my opinion that the crack generally occurs on the outer surface. When there is a heavy pressure on the engine the tendency is to bulge out the sides of the fire-box, whether the stay-bolts are cracked or not. I do not think they will pull apart. After they are broken the tendency is for the pressure to bulge all the way around. With pressure it bulges, and with more pressure it bulges a little more, and generally breaks more. That would be the tendency, and to pull out from the edges when the inside box is hot, and when it does pull that way the tendency is to enlarge and to stay there.

Redirect examination by defendant:

When the engine comes in the hostler takes charge of it. He knocks out the fire and places her in the house, or on some switch track. When an engine comes in off a run, whether they let off the

steam and put out the fire or not, depends upon circumstances. If the boiler is to be washed out the fire is stopped, and the steam allowed to escape, and the boiler is washed out. Sometimes it has to be repaired, and if that is the case the fire has to be removed, and you have some place to take it, and you save coal by allowing it to go out. Sometimes the engine is not used all the time, and of course then the fire is allowed to go out.

J. A. LLOYD, for the defendant, testified:

I live at Longview. In January I was boiler-maker T. & P. round-house, Longview. I remember having to do with engine No. 219 during January, 1893, testing stay-bolts in the boiler. The stay-bolts were all inspected by the hammer test, made by
83 a boiler-maker inside and a helper outside with a sledge; I was the helper. We tested all of them. All of them were good. That was the latter part of January. It exploded the next month in Fort Worth. I could tell that the bolts were good, when I examined it, by the sound made on the bolts. I am 20 years old. Have been in this business 2½ years. They did not put me to inspecting the boilers. I was helping the inspector. I had nothing to do with passing upon the soundness of the bolts. I cannot tell where the man is that inspected it. Cannot tell how long he left after the boiler exploded. It was not the next day. Don't remember how many days after. He was in the employ of the company about six months, I think about three months before the boiler bursted. He had nothing to do with making a report about the boiler bursting. He reported the work done on the boiler. We have a slip kept every week and it is put in the book. I reckon they kept the book. The book shows the report on the boiler. In testing I held the bar on the outside, and nobody was with me on the outside. The boiler inspector was on the inside, his name was Stevenson. Nobody else was around the boiler at that time. The foreman was not around there. He did not stand there and see it done. The inspector made the report of the boiler. The man on the inside inspected it.

In my employment for the T. & P. I first worked in the Marshall shops, and then went to work at Longview in Sept., 1892. I was there from September to February. During that time I was helper to the boiler-maker, helping to do the boiler-work, putting in the stay-bolts, and doing other boiler-work. Don't remember how many stay-bolts we put in engine 219. Did not put in any at all the last time we tested it. Don't remember whether we put in any the time before the last time. Don't remember when we tested her before that. Don't remember any time but that time. She was tested every week though. They were not in the habit of stripping the sides. She was stripped when any stay-bolts were broken. Don't remember of engine 219 ever being stripped.

84 GEORGE M. LOVETT recalled by the defendant:

The paper now shown me is a weekly report. This is one I had the other day. It is the report of the foreman of the mechanics. This is the report I made.

Cross-examined by plaintiff:

I did not keep a book at that time. Never kept any. Never had it. I did not burn the original report up. I do *I do* not know what became of the original report of the man that does the hammering. We do not keep them at all. This is my original report. This is the master mechanic's or the general foreman of the machinists' weekly report, to the superintendent of motive power or rolling stock. They read "Report of stay-bolts examined for engine" so and so, and this is for the week ending Jan. 22, 1893. I did not examine the engine myself. I would take a piece of paper and place on it all the numbers of the engines in a row, and give it to this boiler-maker, and as he examined the stay-bolts he would put opposite the engine on the paper the engine he examined, and if he found any stay-bolts *bolts* broken he would come and tell me at once, and put it down here on the paper, and I would tell him what to do, and I would take this at the end of each week and make this report of mine out from it exactly, generally on Sunday morning, as it has to be in the hands of the superintendent of motive power on Monday morning. I would make an exact copy of the inspector's report. I have not got the report of Stevenson, but I copied it all right, I can say that he never reported a broken stay-bolt. He never did report a broken stay-bolt in engine No. 219; his reports were afterwards inspected by me. He reported to me every week. He never made any report to me after this about engine No. 219.

Redirect examination:

I have stated that it was two or three or four weeks after that before the engine was taken to Marshall.

CHAS. M. WELLS, recalled, testified:

I do not remember that I was asked by the defendant about the rivets the last time or not. I examined the rivets of this
85 exploded boiler of engine 219. The rivets on the exploded portion were sheared off of the boiler, torn loose from the front corner around to the top of the end down to the other side. All of these rivets were sheared off. They were cut off between the plates just as plain as if put in the iron shears and cut off. They were just like you would take a knife and cut them in two. One-half of it remained in the other plate and the other remained in the inner plate. It was good material. It was "Otis" steel, the best in the market, but in constructing the boilers we take the solid plate. Where it is 100 per cent. we have no complaint, or where we can exceed 70 per cent. A row of rivets will only be about 56 per cent. of the strength of the solid piece. A double rivet is about 70 per cent. and we can make no seam or joint with one plate to another that is as strong as the solid plate. The punching of holes will render them a little weak as we remove a part of the metal. There is a double-riveted seam *is* about 70 per cent. of the strength of the solid metal, and as metal don't tear, the seam being the weakest part, it just sheared the rivets off. That is not evidence of the weak-

ness of the rivets. It demonstrates that that I have laid down in practice is correct.

Defendant rested.

R. J. THOMPSON, for the plaintiff, testified:

I reside in Fort Worth, Texas. My occupation at the present time is nothing. On February 19, 1893, I was night round-house foreman. I remember the explosion that occurred on engine 219. I was about 25 or 30 feet a little west of north from the engine at the time it exploded. I remember the hostler that brought her out. It was Mr. White. My duty then was to know that the engine was fired up in proper time to take the train out, to be ready to take the train out when the time-card requires it, whenever that was. I had this engine that exploded under my immediate supervision that night, that is to get her ready to go on the track. Before it
86 left the round-house it had between 60 and 70 pounds of steam on, but I did not notice exactly. I know it was in the neighborhood — 60 or 70 pounds. I did not flash my light though. There was difficulty in taking her out on account of want of steam. It was down hill from where she was standing to where she was going, and the hostler pulled the lever back, gave her a forward motion, and she went out. She did not have enough steam to go until he did this. Then she went out on the turn-table. She did not explode on the turn-table. The point where they carried her to take the train that morning was about 25 yards from the turn-table. She was waiting there for the train. The engineer was not called; she was not waiting for the engineer to take charge. I know within a minute or two of the explosion. I took my watch out and the hostler there, Mr. Leak, asked me what time it was. I said 3.10 and she exploded within a minute or two from that time. The other hostler had been gone about ten minutes at the time Mr. Leak asked me this. I noticed whether that engine had any water in her or not and how much. She had three solid *guages* of water in her boiler. When I noticed this I was standing in the gangway between the engine and the tank, where you pass in and out. I was standing there talking to Mr. Leak, the outside hostler. The *guage*-cocks are put in to ascertain the amount of water in the boiler, and I heard the hostler when he opened it and I heard it distinctly and know it was water. That engine had a stop-cock valve on it. She had one of these things on her. That did not go off before the explosion. I think it was a 155-pound cock. That point was where the cock was set at. That was the point of safety. It was its duty to relieve the engine when she reached that point. I only know from hearsay what amount of steam that engine had on it. Mr. White told me. He was on the engine at the time. It was the hostler's duty to report the amount of steam when asked. He did not report to me.

87 Examined by the court:

It was this man's duty, one of his duties, to keep up with the *guage* or what the amount of steam was and water too.

Direct examination resumed:

I know when Mr. White made an examination; he was standing there looking at it at the time he said it. The other man was not on the engine; he was standing on the ground, his name is S. M. Leak. He was called the outside hostler, he takes charge of the engines from the inside hostler, Mr. White. He tells Mr. White the amount of steam and pressure and the condition of the fire and water. He stated that she had 110 pounds of steam and three guages of water. By three guages of water I mean she had her boiler full. Her fire was banked. To bank is to put a fire of coal right under the door and leave the fore parts of the grate bare, not covered, so cold air can get in there between the fire and flue and stop her from making any more steam.

Cross-examination:

The engine had just stopped; White had just stopped her when this conversation occurred. This was about ten minutes before the explosion I suppose. It is a fact that the engine got off the track after she got out of the round-house. She was off the track about five minutes. She was put back on the track. I think I had that engine fired up between nine and ten o'clock to the best of my recollection, on the 18th, about four and a half or five hours before the explosion. It is customary to keep a fire in the engine that long. It is customary to keep a fire all night. You can work on her without putting out the fire. I have a suit myself growing out of this explosion. If I remember right it is for $30,150. This same explosion.

Redirect examination:

I was standing near enough to get hurt.
Testimony closed.

88 The above and foregoing being a statement of all the facts in evidence, the defendant before the jury retired under the charge of the court requested the court to give the jury the following instructions:

1. You are instructed that if you believe from the evidence that defendant used ordinary care in the selection of the engine in question and used the same care in the selection of a competent man to inspect it and keep it in reasonably safe condition, and if you believe from the evidence that the person so employed to inspect said engine and keep it in repair did exercise ordinary care in its inspection and keeping it in good condition, you will find for the defendant.

2. You are instructed that if the defendant used due care in the selection of the inspector Stevenson and exercised reasonable supervision over him and that said Stevenson negligently failed to properly inspect the engine in question, so that in consequence of such failure on his part the explosion in question occurred, his

omission of care would be the negligence of a fellow-servant for which the defendant would not be responsible.

3. You are instructed that if you believe from the evidence that the *evidence that the* defendant originally provided a reasonably safe engine and that it used reasonable care to employ a competent inspector to keep said engine in repair and that it used reasonable supervision to see that such inspector performed his duty, you will find for defendant.

4. You are instructed that the presumption is that the defendant performed its duty in respect to furnishing a reasonably safe engine and in respect to keeping same in reasonably safe repair, and that it devolves upon the plaintiff to establish a preponderance of the evidence that defendant failed to discharge its duty either in supplying such engine or in keeping it in good condition.

5. Defendant asks the court to instruct the jury herein to return a verdict for the defendant.

The above special instructions, which were separately presented and asked, the court refused, and the defendant then and
89 there upon such refusal excepted before the jury retired to the action of the court upon the same, and this bill of exceptions was tendered, allowed, signed and sealed by the court, and thereupon the court charged the jury at the request of defendant, as follows:

You are instructed that the master is not the insurer of the safety of its engines but is required to exercise only ordinary care to keep such engines in good repair, and if he has made such ordinary care he is not liable for any injury resulting to the servant from a defect therein not discoverable by such ordinary care.

You are instructed that the mere fact that an injury is received by a servant in consequence of an explosion, will not entitle him to a recovery, but he must, besides the fact of explosion, show that it resulted from the failure of the master to exercise ordinary care either in selecting such engine or in keeping it in reasonably safe repair.

You are instructed that a railway company is not required to adopt extraordinary tests for discovering defects in machinery, which are not approved, practicable and customary; but that it fulfills its duty in this regard if it adopts such tests as are ordinarily in use by prudently conducted roads engaged in like business and surrounded by like circumstances.

And in its general charge as follows: In this case the jury are instructed, that plaintiff sues defendant for twenty thousand six hundred ($20,600.00) dollars damages, which he says he has suffered by reason of injuries inflicted on him at Fort Worth, Texas, on February 19th, 1893, by the explosion of a locomotive engine operated by defendant.

Plaintiff in his pleadings says that said engine and its boiler were defective in this: that many of the stay-bolts in the boiler were broken and that bands of many of the stay-bolts were worn and corroded by rust. That the sheets of many parts of said engine and its boiler were corroded and eaten away by rust. That

said defects in said engine and boiler were known to defend-
90 ant before said explosion, or could have been known had it exercised proper care in the inspection thereof.

2nd. Plaintiff says that by the explosion of said boiler he was seriously and permanently injured in and about the legs, hips, shoulders, spine, &c. That as a result of said injury plaintiff suffered, now suffers and will continue to suffer all his life under physical and bodily pain and great mental anguish. That he has expended $500.00 on account of his injuries. That when injured he was earning $100.00 per month. That since said injuries, and by reason thereof, he has been unable to pursue any business in the line of his occupation.

3rd. "A railway is bound to use ordinary care to furnish safe machinery and appliances for use by its employés in operating its road, and if ordinary and reasonable care is not exercised by the company to do this, it would be responsible for the injuries to its servants caused by such neglect. The neglect of the servant to whom the company entrusted such duties *in* the neglect of the master."

By ordinary care is meant such as a prudent man would use under the same circumstances. It must be measured by the character and risks of such business; and where such persons whose duty it is to repair the appliances of the business, know, or ought to know by the exercise of reasonable care, of the defects in the machinery, the company is responsible for his neglect.

4th. If the jury believe from the evidence under the foregoing instructions, that the boiler which exploded and injured the plaintiff was defective and unfit for use, and that defendant's servants, whose duty it was to repair such machinery, knew, or by reasonable care might have known of such defects in said machinery, then such neglect upon the part of its servants is imputable to the defendant, and if said boiler exploded by reason of said defects and injured the plaintiff the defendant would be responsible for the injuries inflicted upon plaintiff, if plaintiff in no way, by his own neglect, contributed to his injuries.

91 5th. "An employer of labor in connection with machinery is not bound to insure the absolute safety of the mechanical appliances which he provides for the use of his employés, nor is he bound to supply for their use the best and safest and newest of such appliances, but is bound to use all reasonable care and prudence for the safety of those in his service by providing them with machinery reasonably safe and suitable for use, and the like care devolves upon the master to keep it in repair."

6th. The burden of the proof is on the plaintiff throughout this case to show that the boiler and engine that exploded were improper appliances to be used on its railroad by defendant. That by reason of the particular defects pointed out and insisted on by plaintiff the boiler exploded and injured plaintiff. The burden is also on plaintiff throughout to show you the extent and character of his sufferings and the damages he has suffered by reason thereof. You must also be satisfied that plaintiff was ignorant of the defects in the

boiler that caused its explosion (if the evidence convinces you that such were the case), and that he did not by his negligence contribute to his own injury.

7th. If you find for defendant you will simply say so. If you find for the plaintiff you will say, "We, the jury, find for plaintiff and assess his damage at $——," inserting such sum as you find, not to exceed $20,600.00.

8th. If, under the foregoing instructions, you find for plaintiff you may take into consideration the value of the time lost by him on account of his injuries and his disability to labor in the future, if established by the evidence, considering his occupation and business, if you find for plaintiff.

You may also allow him for mental and physical suffering and money expended on account of his injuries, to the extent you think him entitled under the evidence.

JOHN B. RECTOR, *Judge.*

92 And to the said charge of the court in open court then and there excepted for the following reasons:

1st. Because the court erred in stating to the jury that the plaintiff claimed that the sheets of many parts of said engine and its boiler were corroded and eaten away by rust, and in afterwards charging that if the jury should believe from the evidence under the foregoing instructions that the boiler which exploded and injured plaintiff was defective and unfit for use, etc., and if said boiler exploded by reason of said defects and injured the plaintiff, the defendant would be responsible for the injuries inflicted upon plaintiff because connecting said two portions of said charge it submits to the jury an issue upon which there was absolutely no evidence, to the prejudice of the defendant.

2nd. Because the court erred in that part of its charge where it instructed the jury: "By ordinary care is meant such as a prudent man would use under same circumstances."

3rd. Because — the portion of said charge which renders the defendant liable if its servants whose duty it was to repair the machinery knew, or might by the exercise of reasonable care have known of the defects complained of, and it prescribed too stringent a rule of liability. But the court then and there overruled said exceptions to the charge, and defendant tenders this bill thereof, which is allowed, signed and sealed.

And thereupon the jury retired and after consideration returned a verdict which is copied in the judgment, and thereupon the court rendered judgment against the defendant; and thereafter the defendant moved the court on the grounds presented in its motion, for new trial and to set aside judgment, and the said motion was overruled. Defendant now tenders this its bill of exception, embracing all the foregoing matters and asks that the same be allowed by the court and filed as a part of the record in this case.

T. J. FREEMAN AND
STEDMAN & THOMPSON,
Att'ys for Def't, Texas & Pacific R'y Co.

93 We agree that the above and foregoing is correct bill of exceptions.

BEN. M. TERRELL,
Att'y for Plaintiff, W. K. Barrett.

The foregoing bill of exceptions is approved, allowed and ordered enrolled and filed as a part of the record herein.
March 3, 1894.

J. B. RECTOR,
U. S. District Judge.

The foregoing has the following endorsement, to wit:
No. 1658. W. K. Barrett *vs.* Texas & Pacific R'y Co. Defendant's bill of exceptions. Filed March 3, 1894. J. H. Finks, clerk, by Chas. H. Lednum, deputy.

Assignment of Errors.

Filed March 3, 1894.

W. K. BARRETT *vs.* THE TEX. & PAC. R'Y CO. } In the Circuit Court of U. S. for the Northern District of Texas, at Dallas.

Now comes the defendant, The Texas & Pacific Railway Company, by counsel, and says: That in the record and proceedings in the above-entitled cause there is manifest error, to wit:

1. The court erred in that portion of its charge wherein its states to the jury that the plaintiff claimed in his pleading "that the sheets of many parts of said engine and its boiler were corroded and eaten away by rust," and in afterwards charging the jury that "if the jury believed from the evidence under the foregoing instructions that the boiler which exploded and injured plaintiff was defective and unfit for use, and that defendant's servants, whose duty it was to repair such machinery, knew, or might have know- by reasonable care, of such defects in said machinery, then such neglect upon the part of its servants is imputable to the defendant, and if said boiler exploded by reason of said defects and injured plaintiff the defendant would be responsible for the injuries inflicted upon plaintiff," because, connecting said two parts of said charge, it submits to the jury an issue, namely, the defective
94 condition of the sheets of many parts of said engine and its boiler, upon which there was absolutely no evidence to the prejudice of defendant.

2. The court erred in that part of its charge wherein it instructed the jury as follows: "By ordinary care is meant such as a prudent man would use under same circumstances," inasmuch as said charge leaves to the jury too much latitude, in that, under it, they might hold the defendant to the exercise of the care of the most prudent man.

3. The court erred in that part of its charge wherein it instructed the jury that "if the jury believed from the evidence under the foregoing instructions that the boiler which exploded and injured the plaintiff was defective and unfit for use, and that defendant's servants, whose duty it was to repair such machinery, knew, or by reasonable care might have known of such defects in said machinery, then such neglect upon the part of its servants is imputable to defendant; and if said boiler exploded by reason of said defects and injured plaintiff the defendant would be responsible for the injuries inflicted upon plaintiff," because it makes the defendant liable if the defects complained of were either known or might have been known by reasonable care to the servants of defendant charged with the duty of making repairs, even though such servants may have been competent and prudent and may have actually inspected said engine and boiler and failed to detect the defects.

4. The court erred in refusing special charge No. 1 asked by defendant, which is as follows: "You are instructed if you believe from the evidence that defendant used ordinary care in the selection of the engine in question and used the same care in the selection of a man to inspect and keep it in reasonable safe condition; and if you believe from the evidence that the person so employed to inspect said engine and keep it in repair did exercise ordinary care in its inspection and in keeping it in good condition, you
95 will find for the defendant," because the evidence established the facts to which said instruction was applicable and the court gave no charge presenting the points therein involved, and especially because in that part of the general charge quoted in the third assignment of error the court had told the jury that the defendant would be responsible if its servants charged with the duty of making repairs knew, or by reasonable care might have known, of the defects complained of without informing them what would be the effect of an actual inspection by such servants which failed to discover the defects.

5. The court erred in refusing special charge No. 2 asked by defendant, and which is as follows: "You are instructed that if defendant used due care in the selection of the inspector Stevenson and exercised reasonable supervision over him, and that said Stevenson negligently failed to properly inspect the engine in question so that in consequence of such failure on his part the explosion in question occurred, his omission of care would be the negligence of a fellow-servant, for which the defendant would not be responsible," because the law only required of defendant the duty prescribed in said charge, and the evidence showed that it fully performed that duty in the hiring of said Stevenson and supervising his work.

6. The court erred in refusing special charge No. 3 asked by defendant, and which is — follows: "You are instructed that if you believe from the evidence that the defendant originally provided a reasonably safe engine and that it used the reasonable care to employ a competent inspector to keep said engine in repair and that it used a reasonable supervision to see that such inspector performed his duty, you will find for the defendant," because it correctly meas-

ures the duty of defendant and the evidence established the performance of that duty by defendant.

7. That the court erred in refusing special charge No. 4 asked by defendant, and which is as follows: "You are instructed that the presumption is that the defendant performed its duty in re-
96 spect to furnishing a reasonable safe engine and in respect to keeping same in reasonable safe repair, and it devolves upon plaintiff to establish by a preponderance of the evidence that defendant failed to discharge its duty either in supplying such engine or in keeping it in good condition," because it correctly states the law, and especially because it presents the legal presumption to which defendant was entitled.

8. The court erred in refusing special charge No. 5 asked by defendant, and which is as follows: "Defendant asks the court to instruct the jury herein to return a verdict for the defendant," because the defendant had proved that it had exercised due care in the selection of the engine whose boiler exploded; that it exercised due care in the establishment and maintenance of a system of inspection to enable it to ascertain the defects in the engine and boiler and in having proper repairs made upon the discovery of defects; that it exercised due care in the selection of a competent and proper inspector whose duty it was to inspect the engine and boiler in question and discover defects, if any, and in the event of the discovery of any, to make necessary repairs; that it exercised proper supervision over said inspector to see that he efficiently discharged his duty and that within the proper time prior to said explosion said inspector did with due care examine said engine and boiler without discovering any defects therein, all of which matters were proven without direct contradiction or any positive countervailing testimony.

T. J. FREEMAN AND
STEDMAN & THOMPSON,
Att'ys for Def't.

The foregoing has the following endorsement, to wit:

W. K. Barrett, plaintiff, *vs.* Texas & Pacific Railway Company, defendant. Assignment of errors. Filed March 3, 1894. J. H. Finks, clerk, by Chas. H. Lednum, deputy.

97 *Petition for Writ of Error.*

Filed March 3, 1894.

W. K. BARRETT *vs.* TEXAS & PACIFIC RAILWAY COMPANY.	In the Circuit Court of the United States for the Northern District of Texas, at Dallas.

To the judge of the circuit court of the United States in and for the northern district of Texas, at Dallas, January term, 1894:

Your petitioner, The Texas & Pacific Railway Company, a corporation duly incorporated by and organized under an act of the Congress of the United States, respectfully represents:

That in said term of this court, on to wit, January 30th, 1894, the plaintiff, W. K. Barrett, recovered against petitioner a judgment in the sum of three thousand eight hundred dollars, besides interest at 6 per cent. per annum from date of judgment and costs of suit, in proceedings for recovery of which and in the rendition of which there was and is error to the great prejudice and damage of petitioner. That plaintiff, W. K. Barrett, resides in Tarrant county, Texas, and that his attorney of record, Ben. M. Terrell, also resides in said Tarrant county, Texas.

That petitioner has filed in this court its assignment of errors, and here presents the same for inspection of the court.

Wherefore, petitioner prays that it be granted a writ of error to remove said judgment and proceedings had in said cause to the United States circuit court of appeals for the fifth circuit, to be held in the city of New Orleans, Louisiana, for revision, correction and reversal; and your petitioner will ever pray.

T. J. FREEMAN AND
STEDMAN & THOMPSON,
Attorneys for Petitioner.

Allowed and granted:

JOHN B. RECTOR,
U. S. District Judge.

98 The foregoing has the following endorsement, to wit:
W. K. Barrett *vs.* Texas & Pacific Railway Company. Petition for writ of error. Filed March 3, 1894. J. H. Finks, clerk, by Charles H. Lednum, deputy.

Writ of Error Bond.

Filed March 3, 1894.

W. K. BARRETT *vs.* TEXAS & PACIFIC RAILWAY COMPANY.	In the United States Circuit Court for the Northern District of Texas, at Dallas.

Know all men by these presents, that we, the Texas and Pacific Railway Company, a corporation duly incorporated by and organized under an act of Congress of the United States, as principal, and sureties, are held and firmly bound unto W. K. Barrett in the sum of five thousand dollars, to be paid to the said W. K. Barrett, his executors, administrators, or assigns, to which payment well and truly to be made, we bind ourselves, our heirs, executors and administrators, jointly and severally, by these presents.

Sealed with our seals, using scrowls, and signed with our names, this 3d day of March, 1894.

The condition of the foregoing obligation is such that,

Whereas, lately at a term of the circuit court of the United States for the northern district of Texas, at Dallas, in a suit pending in said court between W. K. Barrett, plaintiff, and The Texas & Pacific

Railway Company, defendant, numbered 1658 on the docket of said court, a judgment was rendered on the 30th day of January, 1894, that the plaintiff should have and recover of the defendant the sum of three thousand eight hundred dollars, with 6 per cent. interest per annum thereon, from date of rendition, as well as all costs of suit; and

Whereas, said Texas & Pacific Railway Company has obtained a writ of error and filed a copy thereof in the office of the clerk of said court to reverse said judgment, and also a citation di-
99 rected to said W. K. Barrett and his attorney of record, Ben. M. Terrell, citing and admonishing him to be and appear at the United States circuit court of appeals for the fifth circuit, to be holden at New Orleans, Louisiana, within thirty days from the 3d day of March, 1894.

Now, if said Texas & Pacific Railway Company shall prosecute its writ of error to effect and answer all damages and costs, if it shall fail to make its plea good, then the above obligation to be void; else in full force and virtue.

THE TEXAS & PACIFIC RAILWAY COMPANY,
By STEDMAN & THOMPSON, *Attorneys.*
A. E. WANT.
MARTIN CASEY.
H. C. EDRINGTON.

Approved March 3, 1894, as a writ of error supersedeas bond.
JOHN B. RECTOR,
U. S. District Judge.

The foregoing has the following endorsement, to wit:
William K. Barrett, plaintiff, *vs.* Texas & Pacific Railway Company, defendant. Writ of error bond. Filed March 3, 1894. J. H. Finks, clerk, by Charles H. Lednum, deputy.

UNITED STATES OF AMERICA:

The President of the United States to the honorable judges of the United States for the northern district of Texas, Greeting:

Because in the record and proceedings, as also in the rendition of the judgment of a plea which is in said circuit court before you or some of you, between W. K. Barrett, plaintiff, and The Texas and Pacific Railway Company, defendant, a manifest error hath happened, to the great damage of The Texas and Pacific Railway Company, as by its complaint appears, we being willing that error, if any hath been, should be duly corrected and full and speedy justice done to the parties aforesaid in this behalf, do command you,
100 if judgment be therein given, that under your seal, distinctly and openly, you send the record and proceedings aforesaid, with all things concerning the same, to the United States circuit court of appeals for the fifth circuit, together with this writ, so that you have the same at the city of New Orleans, La., within thirty days

from the date thereof, in the said United States circuit court of appeals, to be then and there held, and the record and proceedings aforesaid being inspected, the said United States circuit court of appeals may cause further to be done therein to correct that error what of right, and according to the laws and custom of the United States should be done.

Witness the Honorable Melville W. Fuller, Chief Justice of the Supreme Court of the United States, 3d day of March, in the year of our Lord, one thousand eight hundred and ninety-four.

J. H. FINKS, *Clerk*,
By CHARLES H. LEDNUM, *Deputy*.

Allowed by—
JOHN B. RECTOR,
U. S. District Judge.

UNITED STATES OF AMERICA:

The President of the United States to W. K. Barrett, Greeting:

You are hereby cited and admonished to be and appear at the United States circuit court of appeals for the fifth circuit, to be holden at the city of New Orleans, in the State of Louisiana, within thirty days from the date hereof, pursuant to a writ of error filed in the clerk's office of the circuit court of the United States for the northern district of Texas, at Dallas, wherein The Texas and Pacific Railway Company is plaintiff in error and you are defendant in error, to show cause, if any there be, why the judgment rendered against said plaintiff in error, as in the said writ of error mentioned, should not be corrected, and why speedy justice should not be done to the parties in that behalf.

101 Witness, the Honorable Melville W. Fuller, Chief Justice of the United States, 3rd day of March, in the year of our Lord, one thousand eight hundred and ninety-four.

JOHN B. RECTOR,
U. S. District Judge, Northern District of Texas.

I hereby accept service of the foregoing citation in error. This March 6, 1894.

BEN. M. TERRELL,
Att'y for Defendant in Error, Wm. K. Barrett.

Clerk's Certificate.

I, J. H. Finks, clerk of the circuit court of the United States in the fifth circuit and northern district of Texas, do hereby certify that the above and foregoing is a full, true and correct transcript of the record, bill of exceptions, assignment of errors and all proceedings in cause No. 1658, wherein W. K. Barrett is plaintiff, and The Texas & Pacific Railway Company is defendant, except that the original writ of error and citation in error are included therein instead of copies thereof, as fully as the same remains on file and of record in my office, at Dallas, Texas.

Witness, my hand officially, and seal of said court, at
[L. S.] Dallas, Texas, this the 12th day of March A. D. 1894.
J. H. FINKS, *Clerk*,
By CHAS. H. LEDNUM, *Deputy*.

Endorsed: Filed March 26, 1894. J. M. McKee, clerk.

102 November Term, 1893.

TUESDAY, *May* 8, 1894.

(Extract from minutes.)

TEXAS & PACIFIC RAILWAY COMPANY, Plaintiff in Error,
v.
W. K. BARRETT, Defendant in Error.

This cause was regularly called this day, Mr. J. T. Freeman appearing for plaintiff in error, and, no counsel being present for defendant in error, — was, on suggestion of Mr. Freeman, ordered that this cause be continued.

November Term, 1894.

TUESDAY, *January* 29, 1895.

(Extract from minutes.)

TEXAS & PACIFIC RAILWAY COMPANY, Plaintiff in Error,
v.
W. K. BARRETT, Defendant in Error.

This cause came on to be heard this day and was submitted to the court upon briefs of counsel after oral argument of Mr. T. J. Freeman, for plaintiff in error.

103 November Term, 1894.

TUESDAY, *February* 5, 1895.

(Extract from minutes.)

THE TEXAS & PACIFIC RAILWAY COMPANY, Plaintiff in Error,
v.
W. K. BARRETT, Defendant in Error.

This cause came on to be heard on the transcript of the record from the circuit court of the United States for the northern district of Texas, and was argued by counsel.

On consideration whereof it is now here ordered and adjudged by this court that the judgment of the said circuit court in this cause be, and the same is hereby, affirmed.

It is further adjudged that the plaintiff in error, The Texas & Pacific Railway Company, and the sureties on the writ of error bond herein, A. E. Want, Martin Casey, and H. C. Edrington, be condemned to pay the costs of this cause in this court, for which execution may be issued out of said circuit court.

104 *Assignment of Errors.*

(Filed February 13, 1895.)

United States Circuit Court of Appeals for the Fifth Circuit.

THE TEXAS AND PACIFIC RAILWAY COMPANY, Plaintiff in Error,
v.
W. K. BARRETT, Defendant in Error. } No. 226.

Now comes The Texas and Pacific Railway Company, plaintiff in error, by its attorney, and says that in the record and proceedings in the above-entitled cause there is manifest error, in this, to wit:

I.

The circuit court of appeals erred in its judgment affirming the judgment of the circuit court for the northern district of Texas.

II.

105 The circuit court of appeals erred in its judgment affirming the judgment of the circuit court for the northern district of Texas and in holding that said court committed no error in that portion of its general charge "wherein it states to the jury that the plaintiff claimed in his pleading 'that the sheets of many parts of said engine and its boiler were corroded and eaten away by rust,' and in afterwards charging the jury that, 'if the jury believe from the evidence under the foregoing instructions that the boiler which exploded and injured plaintiff was defective and unfit for use, and that defendant's servants, whose duty it was to repair such machinery, knew or might have known by reasonable care of such defect in said machinery, then such neglect upon the part of its servants is imputable to the defendant, and if said boiler exploded by reason of said defects and injured plaintiff, the defendant would be responsible for the injuries inflicted upon plaintiff,' because, connecting said two parts of said charge, it submits to the jury an issue, namely, the defective condition of the sheets of many parts of said engine and its boiler, upon which there was absolutely no evidence to the prejudice of defendant."

III.

The circuit court of appeals erred in its judgment affirming the judgment of the circuit court for the northern district of Texas, and in holding that said court committed no error in that portion of its general charge "wherein it instructed the jury as fol-
106 lows: 'By ordinary care is meant such as a prudent man would use under the same circumstances,' inasmuch as said charge leaves to the jury too much latitude, in that under it they might hold the defendant to the exercise of the care of the most prudent man."

IV.

The circuit court of appeals erred in its judgment affirming the judgment of the circuit court for the northern district of Texas, and in holding that said court committed no error in that portion of its general charge "wherein it instructed the jury that, 'if the jury believe from the evidence under the foregoing instructions that the boiler which exploded and injured the plaintiff was defective and unfit for use, and that defendant's servants, whose duty it was to repair such machinery, knew, or by reasonable care might have known, of such defects in said machinery, then such neglect upon the part of its servants is imputable to defendant, and if said boiler exploded by reason of said defects and injured plaintiff the defendant would be responsible for the injuries inflicted upon plaintiff,' because it makes the defendant liable if the defects complained of were either known or might have been known by reasonable care to the servants of defendant charged with the duty of making repairs, even though such servants may have been competent and prudent, and may have actually inspected said engine and boiler and failed to detect the defects."

107 V.

The circuit court of appeals erred in its judgment in affirming the judgment of the circuit court for the northern district of Texas in holding that it committed no error in refusing to give special charge No. 1 asked by plaintiff in error, which is as follows:

"You are instructed, if you believe from the evidence that defendant used ordinary care in the selection of the engine in question, and used the same care in the selection of a man to inspect and keep it in a reasonably safe condition, and if you believe from the evidence that the person so employed to inspect said engine and keep it in repair did exercise ordinary care in its inspection and in keeping it in good condition, you will find for the defendant,"

Because the evidence established the facts to which said instruction was applicable and the court gave no charge presenting the points therein involved, and especially because in that part of the general charge quoted in the third assignment of error the court had told the jury that the defendant would be responsible if its servants charged with the duty of making repairs knew, or by reasonable care might have known, of the defects complained of without informing them what would be the effect of an actual inspection by such servants which failed to discover the defects.

108 VI.

The circuit court of appeals erred in its judgment in affirming the judgment of the circuit court for the northern district of Texas in holding that it committed no error in refusing to give special charge No. 2 asked by plaintiff in error, which is as follows:

"You are instructed that if defendant used due care in the selection of the inspector, Stevenson, and exercised reasonable

supervision over him, and that said Stevenson negligently failed to properly inspect the engine in question, so that in consequence of such failure on his part the explosion in question occurred, his omission of care would be the negligence of a fellow-servant, for which the defendant would not be responsible,"

Because the law only required of defendant the duty prescribed in said charge, and the evidence showed that it fully performed that duty in the hiring of said Stevenson and supervising his work.

VII.

The circuit court of appeals erred in its judgment in affirming the judgment of the circuit court for the northern district of Texas in holding that it committed no error in refusing to give special charge No. 3 asked by plaintiff in error, which is as follows:

109 "You are instructed that if you believe from the evidence that the defendant originally provided a reasonably safe engine, and that it used reasonable care to employ a competent inspector to keep said engine in repair, and that it used a reasonable supervision to see that such inspector performed his duty, you will find for the defendant,"

Because it correctly measures the duty of defendant, and the evidence established the performance of that duty by defendant.

VIII.

The circuit court of appeals erred in its judgment in affirming the judgment of the circuit court for the northern district of Texas in holding that it committed no error in refusing to give special charge No. 4 asked by plaintiff in error, which is as follows:

"You are instructed that the presumption is that *that* the defendant performed its duty in respect to furnishing a reasonably safe engine and in respect to keeping same in reasonable safe repair, and it devolves upon plaintiff to establish by a preponderance of the evidence that defendant failed to discharge its duty either in supplying such engine or in keeping it in good condition,"

Because it correctly states the law, and especially because it presents the legal presumption to which defendant was entitled.

110 IX.

The circuit court of appeals erred in its judgment in affirming the judgment of the circuit court for the northern district of Texas in holding that it committed no error in refusing to give special charge No. 5 asked by plaintiff in error, which is as follows:

"Defendant asks the court to instruct the jury herein to return a verdict for the defendant,"

Because the defendant had proved that it had exercised due care in the selection of the engine whose boiler exploded; that it exercised due care in the establishment and maintenance of a system of inspection to enable it to ascertain the defects in the engine and boiler, and in having proper repairs made upon the discovery of defects; that it exercised due care in the selection of a competent

and proper inspector, whose duty it was to inspect the engine and boiler in question and discover defects, if any, and in the event of the discovery of any to make necessary repairs; that it exercised proper supervision over said inspector to see that he efficiently discharged his duty, and that within the proper time prior to said explosion said inspector did, with due care, examine said engine and boiler without discovering any defects therein; all of which matters were proven without direct contradiction or any positive countervailing testimony.

111 Wherefore The Texas and Pacific Railway Company, plaintiff in error, prays that said judgment be reversed; and it will ever pray.

(Signed) T. J. FREEMAN,
Attorney for The Texas & Pacific Railway Company, Plaintiff in Error.

Endorsed: Filed February 13, 1895. J. M. McKee, clerk.

112 *Petition for Writ of Error.*

(Filed February 13, 1895.)

United States Circuit Court of Appeals for the Fifth Circuit.

THE TEXAS AND PACIFIC RAILWAY COMPANY, Plaintiff in Error,
v.
W. K. BARRETT, Defendant in Error. } No. 226.

To the Honorable Melville W. Fuller, Chief Justice, or to any associate justice of the Supreme Court of the United States:

Now comes the Texas and Pacific Railway Company, by its attorney, and complains that in the record and proceedings, and also in the rendition of the judgment of the United States circuit court of appeals for the fifth circuit, sitting at New Orleans, in the above styled and numbered cause, on the 5th day of February, 1895, affirming the judgment of the United States circuit court for
113 the northern district of Texas in said cause, manifest error hath intervened, to the great damage of the said The Texas and Pacific Railway Company; that the jurisdiction of the circuit court for the northern district of Texas in this cause depended upon the fact that The Texas and Pacific Railway Company, defendant therein, was a corporation created by an act of Congress; that the amount involved herein and the matter in controversy exceeds one thousand dollars, besides costs, and this is not a case in which the jurisdiction of the circuit court of appeals is made final.

Wherefore it prays for allowance of writ of error, to the end that this cause and said judgment may be carried to the Supreme Court of the United States, and it prays for supersedeas of said judgment and such other process as may cause the same to be corrected by the said Supreme Court.

(Signed) T. J. FREEMAN,
Attorney for the Texas & Pacific Railway Company.

Writ of error and supersedeas allowed and bond fixed at the sum of $7,600 this the 23d day of February, 1895.

(Signed) E. D. WHITE,
Associate Justice of the Supreme Court of the United States.

Endorsed: Filed February 13, 1895. J. M. McKee, clerk.

114 *Writ of Error Bond.*

(Filed March 4, 1895.)

Know all men by these presents that we, The Texas and Pacific Railway Company, as principal, and George J. Gould, of Lakewood, in the State of New Jersey, as surety, are held and firmly bound unto William K. Barrett in the full and just sum of seven thousand six hundred dollars ($7,600), to be paid to the said William K. Barrett, his certain attorney, executors, administrators, or assigns; to which payment, well and truly to be made, we bind ourselves, our successors, heirs, executors, and administrators, jointly and severally, by these presents.

Sealed with our seals and dated this 20th day of February, in the year of our Lord one thousand eight hundred and ninety-five.

Whereas lately, at a regular term of the United States circuit court of appeals for the fifth circuit, in a suit depending in said court between The Texas and Pacific Railway Company, plaintiff in error, and William K. Barrett, defendant in error, a judgment was rendered against the said The Texas and Pacific Railway Company, and the said The Texas and Pacific Railway Company having obtained a writ of error and filed a copy thereof in the clerk's office of the said court to reverse the judgment in the aforesaid suit, and a citation directed to the said William K. Barrett or his at-
115 torney of record, citing and admonishing them to be and appear at a Supreme Court of the United States, to be holden at Washington, within 30 days from the date thereof:

Now, the condition of the above obligation is such that if the said The Texas and Pacific Railway Company shall prosecute said writ of error to effect and answer all damages and costs if it fail to make its plea good, then the above obligation to be void; else to remain in full force and virtue.

(Signed) THE TEXAS & PACIFIC RAILWAY CO., [SEAL.]
By C. E. SATTERLEE.
GEO. J. GOULD.

Sealed and delivered in presence of—
(Signed) D. D. DUNCAN. [SEAL.]

Approved by—
(Signed) E. D. WHITE.

Feb'y 23, 1895.

Endorsed: Filed March 4, 1895. J. M. McKee, clerk.

116 *Opinion.*

(Filed February 5, 1895.)

United States Circuit Court of Appeals, Fifth Circuit, November Term, 1894.

THE TEXAS & PACIFIC RAILWAY COMPANY, Plaintiff in Error,
v.
W. K. BARRETT, Defendant in Error. } No. 226.

Error to the circuit court of the United States, northern district of Texas.

Before McCormick, circuit judge, and Bruce and Toulmin, district judges.

On the 19th day of February, 1893, W. K. Barrett, the appellee, who was plaintiff in the court below, was in the employ of
117 the Texas Pacific Railway Company in the capacity of a night fireman of a switch-engine then and there in use in the yards of said company at Fort Worth. On the night of that day the company, by its employees, placed upon a track upon said yard a locomotive engine with steam up to take out a train.

While appellee was standing near this engine in the yard it exploded, blowing him a considerable distance from the place he was standing. He was struck by a part of the engine's jacket, scalded, and was seriously and permanently injured.

He alleges that said explosion and injury to him was caused by defendant's negligence in failing to furnish a safe and suitable engine, and that the explosion of said engine resulted from the defective, weak, and unsafe condition in which it was at and before the explosion.

It is charged that many of the stay-bolts in the boiler of said locomotive were broken; that it was out of repair; that the heads of many stay-bolts were corroded by rust, and that the boiler could not bear and stand the pressure of steam, and that the defendant at and before the time of the explosion was and had been negligent and careless in not properly inspecting and causing the boiler on said engine to be properly repaired, and that the defendant knew or ought to have known that the engine was in a dangerous and unsafe condition. The defendant company answers by a general denial, and says if plaintiff was injured as he claims it re-
118 sulted from and was caused by the negligence of his fellow-servants; and further answering, it avers that it exercised due care in the selection of the engine alleged to have exploded and in keeping it in a reasonably safe condition and good repair; that it used due care in the selection, employment, and retention of competent and skillful servants to inspect said engine from time to time

and to keep same in good repair, and that to such servants was committed the inspection of said engine and the keeping of same in good condition and repair, defendant exercising over them such supervision and control and to render reasonably sure the faithful and efficient performance of said duties, and that defendant used all the care that the law required in respect to the procurement and keeping in good condition and repair said engine; and this defendant is ready to verify.

Further answering herein, defendant avers that the person to whom it committed the duty of inspecting said engine and keeping same in good repair and condition carefully inspected same and kept same in good repair and condition; and this defendant is ready to verify.

BRUCE, *District Judge:*

The leading fact in the case is the explosion of the boiler while the locomotive was at rest standing in the yard of the com-
119 pany, with no extra pressure of steam, waiting to take out a train.

How is this explosion to be accounted for? Can it be done on the theory of inevitable accident, which prudence and care could not reasonably have guarded against?

Effects like this must have a cause, and the science of physics is in aid of an effort to discover the cause. Soon after the explosion a number of persons, whose testimony is in the record, came upon the yard where the explosion took place and made examination of the pieces and broken fragments of the boiler, and their testimony tends to show, if it does not fully establish, that the boiler of the locomotive at the time of the explosion and for a considerable time before that was and had been in a weak and unsafe state by reason of the condition of the stay-bolts, many of which had been broken before the explosion, some of them for a long time before, as appeared from their rusted and corroded condition.

It also appears that there are well-known modes of testing the condition of stay-bolts in a boiler engine, and the testimony is to the effect that if any of these tests had been properly applied to the boiler within a reasonable time before the explosion that the true condition of the stay-bolts would have been discovered.

It is true there is some conflict in the testimony of the witnesses for the plaintiff in the court below and the testimony of the
120 defendant's witnesses, but it was submitted to the jury, and the question here is, whether the finding of the jury was had under proper instruction from the trial judge as to the law of the case.

The plaintiff in the court below, appellee here, was, at the time of the injury complained of, an employee of the defendant company, but not in any way in charge of that particular locomotive upon which the boiler exploded. He was standing near this engine at the time in the discharge of his duties to the company, and the question arises as to the measure of duty the defendant company owed him under the circumstances. A locomotive charged with steam to

propel trains of cars is a dangerous machine, and the duty imposed upon the defendant company, which it owed to its employees, is that due care should be used that it is kept and maintained in a safe and proper condition, and the measure of skill and care required of those who use and control such agencies of power and danger must bear proportion to the consequences liable to follow from the want of such care and skill.

In Hough *v.* Railway Company, 100 U. S., 218, the court, after stating the general rule exempting the master from liability to a servant for injuries caused by the negligence of a fellow-servant, say: "But the obligation still remains to provide and maintain in suitable condition the machinery and apparatus to be used by its employees, and the obligation the more important and the degree
121 of diligence the greater in proportion to the danger which may be encountered."

Those, at least, in the organization of the corporation who are invested with controlling or superior authority in that regard represent its legal personality—their negligence from which injury results is the negligence of the corporation. The latter cannot, in respect of such matters, interpose between it and the servant who has been injured without fault on his part the personal responsibility of an agent who, in exercising the master's authority, has violated the duty he owes as well to the servant as to the corporation.

Other authorities might be cited in which the principles applicable to cases of this character are announced and applied. R. R. Co. *v.* Herbert, 116 U. S., 647; Chicago & Milwaukee Railroad *v.* Ross, 112 U. S., 377; Union Pacific R. R. Co. *v.* Daniels, 152 U. S., 688.

In the case last cited the court says, quoting with approval: "The law is well settled, both here and in England, our mother country, that the employer should adopt such suitable implements and means to carry on the business as are proper for that purpose. * * * If by reasonable care and prudence the master may know of the defect in the machinery which he operates, it is his duty to keep advised of its condition and not needlessly expose his servants to peril or danger." * * *

There may seem to be some want of harmony in the decided cases upon this subject.

The language of courts in the opinions delivered is some-
122 times shaded by the facts in the particular case then under consideration, and thus may sometimes give rise to an apparent difference in the rules applied when none really exists.

The charges Nos. 1, 2, 3, 4, and 5 requested by the defendant and separately presented, asked, and refused by the court, to which ruling exception was taken, were properly refused.

The defendants then excepted to specified portions of the main charge given by the court.

We find no error in the rulings of the court, either as to the charges given or refused, and the judgment of the court below is affirmed.

123 UNITED STATES OF AMERICA, *ss:*

The President of the United States to the honorable the judges of the United States circuit court of appeals for the fifth circuit, Greeting:

Because in the record and proceedings, as also in the rendition of the judgment of a plea which is in the said United States circuit court of appeals, before you or some of you, between The Texas and Pacific Railway Company, plaintiff in error, and William K. Barrett, defendant in error, a manifest error hath happened, to the great damage of the said The Texas and Pacific Railway Company, as by its complaint appears, we, being willing that error, if any hath been, should be duly corrected and full and speedy justice done to the parties aforesaid in this behalf, do command you, if judgment be therein given, that then, under your seal, distinctly and openly, you send the record and proceedings aforesaid, with all things concerning the same, to the Supreme Court of the United States, together with this writ, so that you have the same in the said Supreme Court, at Washington, within thirty days from the date hereof, that, the record and proceedings aforesaid being inspected, the said Supreme Court may cause further to be done therein to correct that error what of right and according to the laws and customs of the United States should be done.

Seal of the Supreme Court of the United States.

Witness the Honorable Melville W. Fuller, Chief Justice of the United States, the 23d day of February, in the year of our Lord one thousand eight hundred and ninety-five.

JAMES H. McKENNEY,
Clerk of the Supreme Court of the United States.

Allowed by—
E. D. WHITE,
Associate Justice of the Supreme Court of the United States.

[Endorsed:] No. 226. Writ of error. Filed March 4, 1895. J. M. McKee, cl'k.

124 UNITED STATES OF AMERICA, *ss:*

To William K. Barrett or his attorney of record, Ben. M. Terrell, Greeting:

You are hereby cited and admonished to be and appear at a Supreme Court of the United States, at Washington, within 30 days from the date hereof, pursuant to a writ of error filed in the clerk's office of the United States circuit court of appeals for the fifth circuit, wherein The Texas and Pacific Railway Company is plaintiff in error and you are defendant in error, to show cause, if any there be, why the judgment rendered against the said plaintiff in error, as in the said writ of error mentioned, should not be corrected and why speedy justice should not be done to the parties in that behalf.

Witness the Honorable Edward D. White, associate justice of the Supreme Court of the United States, this 23d day of February, in the year of our Lord one thousand eight hundred and ninety-five.

E. D. WHITE,
Associate Justice of the Supreme Court U. S.

125 [Endorsed:] No. 226. Citation. Filed M'ch 4, 1895. J. M. McKee, clerk.

Service of the within citation is accepted and copy of same waived.
Feb'y 28, 1895.

BEN. M. TERRELL,
Att'y for W. K. Barrett, Def't in Error.

126 United States Circuit Court of Appeals for the Fifth Circuit.

I, James M. McKee, clerk of the United States circuit court of appeals for the fifth circuit, do hereby certify that the foregoing 118 pages, numbered from 1 to 118, inclusive, contain a true copy of the record, pleas, process, proceedings, and all papers in the case of The Texas & Pacific Railway Company, plaintiff in error, *v.* Wm. K. Barrett, defendant in error, No. 226, November term, 1894, as the same remains upon the files and records of said United States circuit court of appeals, and the original writ of error and the original citation.

Seal United States Circuit Court of Appeals, Fifth Circuit.

In testimony whereof I hereunto subscribe my name and affix the seal of said United States circuit court of appeals, at the city of New Orleans, this 13th day of March, A. D. 1895.

JAMES M. McKEE,
Clerk of the United States Circuit Court of Appeals for the Fifth Circuit.

Endorsed on cover: Case No. 15,838. U. S. circuit court of appeals, fifth circuit. Term No., 247. The Texas & Pacific Railway Company, plaintiff in error, *vs.* William K. Barrett. Filed March 20, 1895.

Office Supreme Court, U. S.
FILED.
MAR 29 1897
CLERK

166-614

Supreme Court of the United States.

OCTOBER TERM, 1896.

No. 247.

THE TEXAS AND PACIFIC RAILWAY COMPANY,
Plaintiff in Error,

vs.

WILLIAM K. BARRETT.

IN ERROR TO THE UNITED STATES CIRCUIT COURT OF APPEALS FOR THE FIFTH CIRCUIT.

BRIEF FOR PLAINTIFF IN ERROR.

JOHN F. DILLON,
WINSLOW S. PIERCE,
DAVID D. DUNCAN,
Counsel for the Railway Co.

C. G. Burgoyne, Walker and Centre Streets, N. Y.—1897.

Supreme Court of the United States.

OCTOBER TERM, 1898.

THE TEXAS AND PACIFIC RAILWAY COMPANY,
Plaintiff in Error,

vs.

WILLIAM K. BARRETT.

No. 247.

IN ERROR TO THE UNITED STATES CIRCUIT COURT OF APPEALS FOR THE FIFTH CIRCUIT.

Statement.

This case was instituted March 22, 1893, in the District Court of Tarrant County, Texas, by William K. Barrett, who in his petition (Tr., p. 2), and in his first amended original petition (Tr., p. 10), describes himself as a resident of said Tarrant County, against The Texas and Pacific Railway Company, which company, he alleged,

"Is a railway corporation duly incorporated, and that it has in Tarrant County an office and agency, and that J. T. Clements, of the City of Fort Worth, in said county, is its local agent. That on or before, to wit, the 19th day of February, 1893, defendant was the owner of and was operating in and through said Tarrant County and in and through said City of Fort Worth a certain line of railway; that in said city de-

fendant kept, operated, used and maintained at and before the time aforesaid a roundhouse, work and repair shops and incidental department; also switches, tracks and premises contiguous and appurtenant thereto which it then and there used for the reception, deposit, repair and keeping of railway engines and cars."

service was made upon said Clements. (Tr. p. 6.)

There is no proof nor claim that any corporation has ever been created under the laws of the State of Texas, named the Texas and Pacific Railway Company, nor that any other corporation by that name owns and operates, or has owned or operated, any line of railway through the City of Fort Worth. That the plaintiff in error was incorporated under the laws of the United States, and owns and operates a line of railway through the city of Fort Worth, is and has been from the time of its organization a matter of common knowledge and notoriety, especially in the State of Texas, and more especially in the city of Fort Worth, and the county of Tarrant.

On May 8th, 1893, the case was removed from the state court to the federal court for the proper district (Tr., p. 9) on the petition of the defendant The Texas and Pacific Railway Company, setting forth (Tr., p. 6) that it

"was and is a corporation duly organized and existing under and by virtue of the laws of the United States, to wit, 'An Act to incorporate the Texas and Pacific Railroad Company, and to aid in the construction of its road, and for other purposes,' approved March 3d, 1871, and acts amendatory thereof and supplemental thereto, including an act approved May 2, 1872, whereby, among other things, the name and style and title of said Texas and Pacific Railroad Company was changed to the Texas and Pacific Railway Company.

"That the above-entitled action is a civil suit arising under the laws of the United States, of which the circuit court of the United States for the northern district

of Texas is given original jurisdiction by act of Congress, approved March 3, 1887, to wit, an Act entitled An Act to amend the act of Congress, approved March 3, 1875,' entitled "An Act to determine the jurisdiction of circuit courts of the United States and to regulate the removal of causes from state courts and for other purposes,"' and the acts of Congress, approved August 13, 1888, entitled 'An Act to correct the enrollment of an Act, approved March 3d, 1887,' entitled "An Act to amend sections 1, 2, 3 and 10 of an Act to determine the jurisdiction of circuit courts of the United States, and to regulate the removal of causes from the state courts, and for other purposes,"' approved March 3d, 1875."

The defendant company was originally chartered by the Congress of the United States by an Act entitled "*An act to incorporate* THE TEXAS AND PACIFIC RAILROAD COMPANY *and to aid in the construction of its road and for other purposes*" (16 Stats., 573). The first section of this Act of Congress enacts that certain persons by name

"and all such persons as shall or may be associated with them and their successors are HEREBY CREATED a body politic and corporate in fact and in law by the name, style and title of the Texas and Pacific Railroad Company and by that name shall have perpetual succession and shall be able to sue and be sued, plead and be impleaded, defend and be defended in all courts of law and equity within the United States and may make and use a common seal; and the said corporation is hereby authorized and empowered to lay out, locate, construct, furnish, maintain and enjoy a continuous line of railroad and telegraph line with the appurtenances from a point at or near Marshall, County of Harrison and State of Texas; thence by the most direct and eligible route to be determined by said company near the 32d parallel of north latitude to a point at or near El Paso; thence through New Mexico and Arizona to a point on the Rio Colorado at or near the southern boundary of California; thence by the most direct and eligible route to San Diego, California."

The Act makes a grant of right of way through the public lands and a grant of the public lands, declares the railway to be a military and post road and subjects it to public duties as such.

This Act was amended May 2d, 1872 (17 Stats., 59). The first section enacts "*That the name, style and title of the Texas and Pacific Railroad Company shall hereafter be* THE TEXAS AND PACIFIC RAILWAY COMPANY."

It was further amended March 3d, 1873 (17 Stats., 598), and June 22d, 1874 (18 Stats., 197).

Plaintiff, in his "amended original petition" (Tr., p. 10), alleged that on February 19th, 1893, he was injured in the defendants yard in the city of Fort Worth, Texas, by the explosion of an engine boiler alleged to be in a dangerous and defective condition through the negligence and carelessness of the railway company, its agents and servants.

Defendant, in its "amended original answer" (Tr., p. 13), demurred generally, pleaded the general issue, and specially alleged the contributory negligence of the plaintiff and its own due care in the selection of engines and in keeping them in proper repair end condition, and also in the selection and employment of competent and skillful servants. The jury to whom the issues were submitted found a verdict in favor of the plaintiff for the sum of $3,800, for which sum, with interest and costs, judgment was rendered (Tr., p. 14). The case was taken to the United States Circuit Court of Appeals, for the Fifth Circuit, which court affirmed the judgment below (Tr., p. 70). The case was brought to this court by writ of error.

Assignment of Errors.

I.

The circuit court of appeals erred in its judgment affirming the judgment of the circuit court for the northern district of Texas.

II.

The circuit court of appeals erred in its judgment affirming the judgment of the circuit court for the northern district of Texas, and in holding that said court committed no error in that portion of its general charge wherein it states to the jury that the plaintiff claimed in his pleading "that the sheets of many parts of said engine and its boiler were corroded and eaten away by rust," and in afterwards charging the jury that, "if the jury believe from the evidence under the foregoing instructions that the boiler which exploded and injured plaintiff was defective and unfit for use, and that defendant's servants, whose duty it was to repair such machinery, knew or might have known by reasonable care of such defect in said machinery, then such neglect upon the part of its servants is imputable to the defendant, and, if said boiler exploded by reason of such defects, and injured plaintiff, the defendant would be responsible for the injuries inflicted upon plaintiff," because, connecting said two parts of said charge, it submits to the jury an issue—namely, the defective condition of the sheets of many parts of said engine and its boiler—upon which there was absolutely no evidence, to the prejudice of defendant.

III.

The circuit court of appeals erred in its judgment affirming the judgment of the circuit court for the northern district of Texas, and in holding that said court committed no error in that portion of its general charge wherein it instructed the jury as follows: "By ordinary care is meant such as a prudent man would use under the same circumstances," inasmuch as said charge leaves to the jury too much latitude, in that

under it they might hold the defendant to the exercise of the care of the most prudent man.

IV.

The circuit court of appeals erred in its judgment affirming the judgment of the circuit court for the northern district of Texas, and as holding that said court committed no error in that portion of its general charge wherein it instructed the jury that "if the jury believe from the evidence under the foregoing instructions that the boiler which exploded and injured the plaintiff was defective and unfit for use, and that defendant's servants, whose duty it was to repair such machinery, knew, or by reasonable care might have known, of such defects in said machinery, then such neglect upon the part of its servants is imputable to defendant; and if said boiler exploded by reason of said defects and injured plaintiff, the defendant would be responsible for the injuries inflicted upon plaintiff," because it makes the defendant liable if the defects complained of were either known, or might have been known by reasonable care, to the servants of defendant charged with the duty of making repairs, even though such servants may have been competent and prudent, and may have actually inspected said engine and boiler and failed to detect the defects.

V.

The circuit court of appeals erred in its judgment in affirming the judgment of the circuit court for the northern district of Texas, in holding that it committed no error in refusing to give special charge No. 1 asked by plaintiff in error, which is as follows:

"You are instructed, if you believe from the evidence that defendant used ordinary care in the selection of the engine in question and used the same care in the selection of a man to inspect and keep it in a reasonably safe condition, and if you believe from the evidence that the person so employed to inspect said engine and keep it in repair did exercise ordinary care in its inspection and in keeping it in good condition, you will find for the defendant."

Because the evidence established the facts to which said instruction was applicable and the court gave no

charge presenting the points therein involved, and especially because in that part of the general charge quoted in the third assignment of error the court had told the jury that the defendant would be responsible if its servants charged with the duty of making repairs knew, or by reasonable care might have known, of the defects complained of without informing them what would be the effect of an actual inspection by such servants which failed to discover the defects.

VI.

The circuit court of appeals erred in its judgment in affirming the judgment of the circuit court for the northern district of Texas in holding that it committed no error in refusing to give special charge No. 2 asked by plaintiff in error, which is as follows:

"You are instructed that if defendant used due care in the selection of the inspector Stevenson and exercised reasonable supervision over him, and that said Stevenson negligently failed to properly inspect the engine in question, so that in consequence of such failure on his part the explosion in question occurred, his omission of care would be the negligence of a fellow-servant, for which the defendant would not be responsible."

Because the law only required of defendant the duty prescribed in said charge, and the evidence showed that it fully performed that duty in the hiring of said Stevenson and supervising his work.

VII.

The circuit court of appeals erred in its judgment in affirming the judgment of the circuit court for the northern district of Texas in holding that it committed no error in refusing to give special charge No. 3 asked by plaintiff in error, which is as follows:

"You are instructed that if you believe from the evidence that the defendant originally provided a reasonably safe engine, and that it used reasonable care to employ a competent inspector to keep said engine in repair, and that it used a reasonable supervision to see that such inspector performed his duty, you will find for the defendant,"

Because it correctly measured the duty of defendant, and the evidence established the performance of that duty by defendant.

VIII.

The circuit court of appeals erred in its judgment in affirming the judgment of the circuit court for the northern district of Texas, in holding that it committed no error in refusing to give special charge No. 4, asked by plaintiff in error, which is as follows :

"You are instructed that the presumption is that the defendant performed its duty in respect to furnishing a reasonably safe engine and in respect to keeping same in reasonable safe repair, and it devolves upon plaintiff to establish by a preponderance of the evidence that defendant failed to discharge its duty either in supplying such engine or in keeping it in good condition,"

Because it correctly states the law, and especially because it presents the legal presumption to which defendant was entitled.

IX.

The circuit court of appeals erred in its judgment in affirming the judgment of the circuit court for the northern district of Texas in holding that it committed no error in refusing to give special charge No. 5 asked by plaintiff in error, which is as follows :

"Defendant asks the court to instruct the jury herein to return a verdict for the defendant,"

Because the defendant had proved that it had exercised due care in the selection of the engine whose boiler exploded ; that it exercised due care in the establishment and maintenance of a system of inspection to enable it to ascertain the defects in the engine and boiler, and in having proper repairs made upon the discovery of defects ; that it exercised due care in the selection of a competent and proper inspector, whose duty it was to inspect the engine and boiler in buestion and discover defects, if any, and in the event of the discovery of any to make necessary repairs ; that it exercised proper supervision over said inspector and to

see that he efficiently discharged his duty, and that within the proper time prior to said explosion said inspector did, with due care, examine said engine and boiler without discovering any defects therein; all of which matters were proven without direct contradiction or any positive countervailing testimony.

ARGUMENT.

I.

Since the removal of this case from the state to the federal court this court has announced its decision in the cases of *Tennessee vs. Union and Planter's Bank, 152 U. S., 455*, and *Oregon Short Line, &c., vs. Skottowe, 162 U. S., 490*, holding in effect that under the Act of August 13th, 1888 (Sec. 866), the federal courts have no jurisdiction of a suit involving a federal question unless such question appears by the plaintiff's original statement of his claim.

Inasmuch as in plaintiff's original petition in this case (Tr., p. 2), and in his first amended original petition (Tr., p. 10), the federal character of the defendant railway company is not set forth in express terms, it may be urged by defendant in error that under the ruling in the case of *Tennessee vs. the Bank* the federal courts have no jurisdiction of this case.

Anticipating such objection, and recognizing the rule of this court that the question of jurisdiction is always in the record, we address ourselves to the proposition that this case does not come within the rulings of this court in the cases above named.

The Federal Courts have jurisdiction of this case.

The salient and controlling features of this case, as respects Federal jurisdiction, are that The Texas and Pacific Railway Company was by a public Act of the Congress of the United States directly created a corporation by the name of The Texas and Pacific Railway Company. This Court will judicially notice the Act of Congress thus creating the defendant Company, and, therefore, it distinctly appears that the defendant company is strictly and purely a corporation of the United States; and this Court has so adjudged in the Pacific Removal cases.

The question of jurisdiction of the Federal Courts is always in the record, and if the record does not show Federal jurisdiction, this court will take notice of that fact and adjudge and determine accordingly, whether the question of jurisdiction is raised by the parties or not.

In *M. C. & L. M. Ry. Co. vs. Swan, 111 U. S., 379*, it was said by Mr. Justice MATTHEWS on behalf of the Court:

"On every writ of error or appeal, the first and fundamental question is that of jurisdiction, first, of this Court, and then of the Court from which the record comes. This question the Court is bound to ask and answer for itself, even when not otherwise suggested, and without respect to the relation of the parties to it."

In *Cameron vs. Hodges, 127 U. S. 322*, Mr. Justice MILLER (p. 325) said:

"This Court has uniformly acted upon the principle that, in order to protect itself from colusive agreements between parties who wish to litigate their controversies in the Federal Courts, it would, on its own motion, take the objection of the want of jurisdiction in the Circuit Court, especially as regards citizenship (Hilton vs. Dickinson, 108 U. S., 165; Morgan's Executor vs. Gay, 19 Wall., 81)."

The principle thus announced has been so often applied by this Court that we deem it unnecessary to make further citations. Accordingly, the first question to which we address our argument is in support of the proposition above stated.

This case was removed from the State to the Federal Court May 8, 1893, before the decision of this Court in *Tennessee vs. Union and Planters' Bank, 152 U. S., 455*, was rendered (March 19, 1894). In that case it was held that, under the Act of August 13, 1888 (c. 866), the Circuit Court of the United States has no jurisdiction, either original or by removal from a State Court, of a suit involving a Federal question, unless it appears by the plaintiff's statement of his own claim that it arises under the Constitution or a statute or treaty of the United States.

The cases reported under this title were bills in equity to recover taxes levied by the State of Tennessee. Two of them were brought in the Circuit Court of the United States and complainant's only allegation as to jurisdiction was that the *defendant claimed* that the State revenue law was in violation of the Constitution of the United States forbidding a State to pass any law impairing the obligation of a contract. The third case was brought in the State Court and was removed to the Federal Court though not even that allegation was made in the bill. **None of the**

parties to the causes was incorporated under laws of the United States nor did any of them possess any powers, rights or privileges under such laws.

The rule thus announced was applied in *Oregon Short Line, &c., Co. vs. Skottowe, 162 U. S., 490* (decided April 20, 1896).

That case has not the slightest bearing on the question of jurisdiction in this case. The Oregon Short Line and Utah Northern Railway Company, defendant in the *Skottowe case*, was a consolidated corporation, which consolidated corporation was formed under authority given by State and Territorial legislation only. There was no act of Congress authorizing the consolidation. One of the constituent companies, to wit, The "Oregon Short Line Railway Company," was originally a Wyoming corporation, and another of the constituent companies, to wit, the Utah and Northern Railway Company, was originally a Utah Territorial corporation; but these two constituent companies had been respectively recognized as corporations by the acts of Congress, approved August 2d, 1882, and June 20th, 1878, referred to by Mr. Justice SHIRAS in *Skottowe's* case (p. 493). These two acts of Congress were applicable to two only of the constituent companies forming the consolidated company which was the defendant in that case. They were the only acts that gave to the defendant company any federal character *or even federal flavor*. This consolidated company, under the laws of the State of Oregon, had taken a lease of or was operating the Oregon Railway and Navigation Company in Oregon. Skottowe was injured by the said consolidated defendant company at The Dalles on the Columbia River, and within the State of Oregon.

Under these circumstances this Court held that the Oregon Short Line and Utah Northern Railway Company, the defendant in that case, did not appear to be a federal corporation. For these reasons we repeat that we cannot see that it has the slightest bearing on the question of the federal jurisdiction over the case now at the bar.

A careful examination of the opinion in the case of *Oregon Short Line, &c., vs. Skottowe, 162 U. S., 490*, shows that the decision of that case was confined to the particular facts involved, and that the Court plainly made it so, apparently for the purpose of avoiding an undue extension of the rule announced in *Tennessee vs. Union and Planters' Bank, 152 U. S., 454.*

The Court speaking through Mr. Justice SHIRAS, said:

"Even if the acts of Congress of June 20, 1878, and August 2, 1882, so far conferred substantial rights and privileges upon the territorial and state corporations, consolidated as the Oregon Short Line and Utah Northern Railway Company, as to bring that company within the doctrine of the Pacific Railroad Removal cases, yet we think that *the present case* comes within the rule of the Federal question, or Federal character of the defendant company must appear from the complaint in the action in order to justify a removal, and that such Federal question or character does not so appear."

The acts referred to by the Court are 20 U. S. Statutes, 241, c. 362, and 22 U. S. Statutes, 185, c. 272, and have already been noticed *(ante*, p. 12*)*. By these acts Congress merely recognized corporations already

In the case now presented to the Court the defendant corporation was not simply organized under a public Act of the Congress of the United States; it was directly *created* by such act. All its rights, powers and privileges are derived solely from the United States. Among them are the right "to sue and be sued, plead and be impleaded, defend and be defended, in all courts of law and equity within the United States." Under the decisions in *Osborne vs. Bank, 9 Wheaton, 738, 819–828*, and *Pacific Railroad Removal Cases, 115 U. S., 1*, the very right to sue a corporation created by the United States is held to be founded upon the laws of the United States. In the latter case Mr. Justice BRADLEY quoted the following from the opinion of Chief-Justice MARSHALL in the *Osborne* case:

"The case of the bank is, we think, a very strong case of this description. The charter of incorporation not only creates it, but gives it every faculty which it possesses. The power to acquire rights of any description, to transact business of any description, to make contracts of any description, to sue on those contracts, is given and measured by its charter, and that charter is a law of the United States. This being can acquire no right, make no contract, bring no suit which is not authorized by a law of the United States. It is not only itself the mere creature of a law, but all its actions and all its rights are dependent on the same law. Can a being thus constituted have a case which does not arise literally as well as substantially under the law? Take the case of a contract, which is put as the strongest against the bank.

"When a bank sues, the first question which presents itself, and which lies at the foundation of the cause, is, has this legal entity a right to sue? Has it a right to come, not into this Court particularly, but into any court? This depends on a law of the United States. The next question is, has this being a right to make this particular contract? If this question be decided in the negative, the cause is determined against the plaintiff; and this question, too, depends entirely

on a law of the United States. These are important questions, and they exist in every possible case.

"The question forms an original ingredient in every cause. Whether it in fact be relied on or not in the defense, it is still a part of the cause and may be relied on. The right of the plaintiff to sue cannot depend on the defense which the defendant may choose to set up. His right to sue is anterior to that defense, and must depend on the state of things when the action is brought. The questions which the case involved, then, must determine its character, whether those questions be made in the cause or not."

THE LEGAL STATUS of the Texas and Pacific Railway Company as a Federal corporation had been directly adjudged by this Court in what are called The Pacific Railroad Removal Cases.

Among those cases was *The Texas and Pacific Railway Company against McAllaster; Texas and Pacific Railway Co. against Kirk; same against Murphy.* The judgment of this Court in those cases was that The Texas and Pacific Company, having been created and organized under the above mentioned Acts of Congress, was entitled to remove into the Circuit Courts of the United States suits brought against it in state courts on the ground that such suits are suits "arising under the laws of the United States," and that (115 U. S., 16) the Texas and Pacific Railway Company "*is strictly and purely a United States corporation;*" and that "the powers, privileges and advantages given to the company by Congress, and the duties imposed upon it, are specified in the acts referred to" (those of March 3, 1871, and May 2, 1872).

It cannot be denied, therefore, that, in the language of the Judiciary Act, this is a suit of a civil nature

organized under local law. It conferred no new powers upon them.

The doctrine of *Osborne vs. Bank* and *The Pacific Railroad Removal cases*, as an examination of the opinions will show, is plainly that where the *very existence* of a corporation is due to a statute of the United States, where its rights, powers and privileges are derived from such a statute, it has a right to remove cases brought against it in State courts to the Federal courts. As we shall hereafter show, this Court has held, in the *Removal cases*, that this defendant The Texas and Pacific Railway Company is "strictly and purely a United States corporation," and that "the powers, privileges and advantages given to the company by Congress and the duties imposed upon it are specified in the acts referred to" (referring to the Act of Incorporation and amendments to it). In this respect it differs radically from the railroad corporations which were parties to the *Skottowe* case.

In view of these facts it is hardly probable that the remark of the Court in the *Skottowe* case above quoted was intended to apply to any other case than the one then before it.

In that case it was also said (pp. 496, 497) :

"Evidence tending to show that a company, styled the Oregon Short Line and Utah Northern Railway Company, was operating and conducting a line of railroad between Portland, Oregon, and The Dalles, Oregon, as a common carrier for hire; that the plaintiff, as a passenger for hire, was injured while in the lawful use of said railroad; that the injuries were caused by the defendant's negligence, and the nature and extent of the injuries thus caused would, if believed by the jury, have clearly sustained the material allegations of the complaint. To justify a recovery in such a case it would not be necessary for the plaintiff to allege or to prove the extent and nature of the defendant's corpor-

ate powers. The defendant's liability did not arise out of its grants of rights and privileges from the several Territories or from the United States. It grew out of its negligence and misconduct in the management of a railroad in the State of Oregon, into which State it is not pretended that it entered *by reason of anything contained in any act of Congress.*"

* * * * * *

" But, even if the Court was obliged, under the allegations of the plaintiff's complaint, to take judicial notice of the defendant company's charter, *no act of Congress was pointed out under which it was acting when operating the railroad in the State of Oregon.* So far as appears, the defendant company existed and was doing business in the State of Oregon solely under the authority of that State, whether express or permissive. *The two acts of Congress referred to do not disclose any intention on the part of Congress to confer powers or rights to be exercised outside of the Territories named therein.*"

It is evident, therefore, that the *Skottowe* decision rested on the special facts of the case, namely, that as the cause of action arose within the State of Oregon, " into which State it is not pretended that it [the railway company] entered by reason of anything contained in any Act of Congress," the mere fact that Congress had recognized the railway companies already existing in certain Territories of the United States, in which the State of Oregon was not included, did not impress the railway company with such a Federal character as would entitle it to the right and privilege of removing the case from the State to the Federal Court as involving a question arising out of a Statute of the United States. There is nothing in the opinion intimating that even if the plaintiff in his complaint had alleged the Federal Statutes above referred to they would have been held to be sufficient to justify a removal of the case from the State to the Federal Court on the ground that a right was involved based on a Federal Statute.

arising under a law of the United States, of which the Circuit Court has original cognizance; nor that such a suit when brought in a State Court may be removed by authority of that act from the State Court to the Federal Court.

In this state of the decisions of this Court it becomes important to all corporations created by the laws of the United States to have the question determined whether a valuable right—that of removing cases from the State to the Federal courts—a right recognized and enforced by this Court for more than seventy years—may be annulled and rendered valueless by the mere neglect or refusal of a plaintiff bringing suit against such a corporation in a State Court to set forth in terms the source of its being; ~~or, as here, by a false allegation of its incorporation.~~ This question is now presented for the determination of this Court.

The Texas and Pacific Railway Company is the creature of the laws of the United States incorporated by a public act of Congress of which the Courts are bound to take judicial notice; an allegation of the title of the railway company is therefore a sufficient allegation of its Federal character.

If the complaint in this case had alleged the truth viz: that the defendant was a corporation created by an Act of Congress the case would unquestionably be removable to the Federal Court. The plaintiffs' allegation is, however, simply that the defendant "is a railway corporation duly incorporated," but this is accompanied with the statement that the defendant owns and operates a line of railway through the City of Fort Worth, which can refer only to the line of the plaintiff in error. That plaintiff, notwithstanding his allegation as to the de-

fendant's incorporation, intended to sue this plaintiff in error is too evident to be controverted. His allegation must be ascribed to a wilful withholding of a fact well known to the pleader for the purpose of excluding the jurisdiction of the Federal Courts. Upon these facts this Court will judicially notice, that the defendant company is created by a public Act of Congress. The case is therefore just as clearly removable as if that fact had been in terms alleged in the complaint, since it is not necessary, under any system of pleading, to allege facts which will be judicially noticed. It is a matter of common and universal knowledge that the Texas and Pacific Company is a Federal corporation, and none other, and our point is that the allegations of the complaint, taken in connection with the fact that this Court will judicially notice, *first*, that the defendant was created by an Act of Congress, and, *second*, that there is no act of the State Legislature in Texas, or in any other State, creating it a corporation, or creating any other corporation by that name, make the case one of unquestionable Federal jurisdiction.

Unless we concede that any person bringing suit against a corporation of the United States may by his personal *ex parte* act confer upon or deprive the Courts of the United States of jurisdiction over his case, as his interest or whim may dictate, the soundness of this proposition must be acknowledged.

The decisions of this Court following the case of *Tennessee vs. Union and Planters' Bank (supra)* are as follows :

Chappell vs. Waterworth, 155 U. S., 102, an action in ejectment, brought in the State Court, which was removed to the Federal Court on a petition setting up that the title to and right of possession of the land in

controversy was in the United States, the property being in use by the Government as a site for a light-house. This Court held that the case was improperly removed.

Postal Telegraph Co. vs. Alabama, 155 U. S., 482, in which it was held that a suit between a State and a citizen of another State is not a suit between citizens of different States, and therefore cannot be removed to a Federal Court.

East Lake Land Co. vs. Brown, 155 U. S., 488, an action in ejectment, brought in the State Court and removed on a petition stating that defendant's right and title to the lands in dispute were founded upon the homestead laws of the United States. The removal was held to be improper on the authority of *Chappell vs. Waterworth (supra).*

Oregon Short Line vs. Skottowe, 162 U. S., 490, already reviewed, *ante, p. 11, et seq.*

It will be noticed that all the decisions of this Court which require that the Federal question must appear in the plaintiff's statement of his case in order that the Federal Courts may have jurisdiction were rendered in cases where some right expressly conferred by the Constitution, laws or treaties of the United States was involved; or which required the construction of such Constitution, laws or treaties; or in which, as in the *Skottowe* case, the defendant corporation was not created by a law of the United States or whose powers were not derived therefrom.

We respectfully submit that in cases of the character of the one at bar where the party defendant is purely a corporation of the United States, deriving all its powers, privileges and advantages from a law of the United States, the real question relates to the *person*

of the defendant corporation, and that the rule properly applicable in such cases should be analogous to that applied in cases where the jurisdiction of the Federal Courts depends upon the adverse citizenship of the parties.

The defendant in this action was incorporated and derives all its powers and privileges from the Act of Congress approved March 3, 1871 (16 Stats., 573, c. 122), and the acts amendatory and supplementary thereto. As has been shown above, this Court has held it to be "strictly and purely a United States corporation." The statute appears in the official publication of the laws of the United States as a "public act" as distinguished from a "private act." Its purpose was of a distinctly public character—the building of a railway from Marshall, Texas, to San Diego, California. Its provisions show that special benefits to the Government were intended to be secured by it. The statute of incorporation (16 Stats., 573) and the amendatory act (17 Stats., 59) appear among the "Public acts" of the United States in the publication of the statutes recognized as official by Section 908 of the Revised Statutes. There can be no question but that the statute of incorporation is a public act.

That the Federal Courts take judicial notice of the public acts of Congress or "the law of the land" is a matter of everyday occurrence.

> "In like manner the law of nations and the general statutes and general customs and usages of merchants, as well as the public statutes and general laws and customs of their own country, as well ecclesiastical as civil, are recognized, without proof, by the courts of all civilized nations" (Greenleaf on Ev., Sec. 5).

This Court has held that a treaty with a foreign power is a law of the land under the Constitution, of

which, as a public act, the Courts of the United States will take judicial notice. In the *Head Money cases, 112 U. S., 579*, Mr. Justice MILLER said:

"The Constitution of the United States places such provisions as these in the same category as other laws of Congress by its declaration that this 'constitution and the laws made in pursuance thereof, and all treaties made, or which shall be made, under authority of the United States, shall be the supreme law of the land.' A treaty, then, is the law of the land as an act of Congress is, whenever its provisions prescribe a rule by which the rights of the private citizen or subject may be determined. And when such rights are of a nature to be enforced in a court of justice, that court resorts to the treaty for a rule of decision for the case before it as it would to a statute."

See, also, *U. S. vs. Rauscher, 119 U. S., 407, 418.*

So, also, a proclamation of the President is held to be a public act of which all Courts of the United States are bound to take notice.

Armstrong vs. U. S., 13 Wall., 154.

This Court evidently took notice of the statutes involved in the *Skottowe* case, for it considered their effect in the opinion rendered in that case (162 U. S., 496).

We therefore urge that, inasmuch as The Texas Pacific Railway Company is the creature of a public act of the Congress of the United States, having no powers except those conferred by that act, and inasmuch as the Federal Courts are bound to take judicial notice of public acts, the allegation of the petition or complaint in this case is a sufficient allegation of the federal character of the corporation.

This contention is not contrary to the decision in the *Skottowe* case, nor do we seek a revision of the ruling

therein made. We respectfully submit that such ruling does not apply to the case now before the Court.

If the observation made by this Court in the *Skottowe* case (quoted *ante*, p. 13), which we respectfully submit was not necessary to the disposition of the case, is to be applied without modification to all corporations created by and organized under Federal law only, the right recognized in *Osborne vs. Bank* and *The Pacific Railroad Removal cases* will be nullified and rendered valueless, and such corporations may thus be deprived of a valuable right based on the very source of their existence; and this may be done by any individual plaintiff at his will, by mere neglect or refusal to allege the authority by which they are incorporated.

More than that, the jurisdiction of the Federal Courts, so jealously guarded by statute law and by the decisions of the Courts, will be placed at the disposal of such a plaintiff and be subject to his ill-will or caprice.

We respectfully submit that a judgment of this court merely affirming or reversing the judgment under review will constitute a recognition of the jurisdiction of the federal courts over this and similar cases.

II.

In actions of tort, growing out of the explosion of an engine boiler, no presumption of negligence arises from the fact that such an explosion took place, but the presump-

tion is that proper appliances were furnished.

L. & N. Ry. Co. vs. Allen, 78 Ala., 494.
M. & M. Ry. Co. vs. Thomas, 42 Ala., 672.
Pierce on Railroads, 382–3.

III.

It is the duty of a trial judge to instruct the jury as to the law applicable to the case on trial, and not to announce abstract principles of law.

Thorwegan vs. King, 111 U. S., 549.
Pleasant vs. Fant, 22 Wallace, 116.
T. & P. Ry. Co. vs. Reed, 31 S. W. Rep., 1058.
T. & P. Ry. Co. vs. Bryant, 56 Fed. Rep., 803.

IV.

When a servant enters into the employment of another he assumes all the risks ordinarily incident to the business. He is presumed to have contracted in reference to all the hazards and risks ordinarily incident to the employment; consequently, he cannot recover for injuries resulting to him therefrom.

The servant takes the risk of the master's mode of conducting his business, though a safer one might be followed, if the servant fully knows the risk and continues to work.

The parties have in view, when engagements for services are made, the risks and dangers incident to the employment, and in consideration of them the rate of compensation is fixed. In all engagements of this character the servant assumes those risks that are incident to the service, and as between himself and the master, he is presumed to have contracted on those terms, and if an injury is sustained by the servant in that service it is an accident and the misfortune must rest on him.

Woods' Master & Servant, 2 edition, section 326.

Woods' Railway Law, 3d Vol., section 370, page 1452.

A. & E. Encycloyedia of Law, Vol. 14, 843, section 23; also page 845.

Texas & Pacific Ry. Co. vs. Minnick, 57 Fed. Rep., pp. 362–8.

Tuttle vs. Railway, 122 U. S., 189.

Randall vs. Railway, 109 U. S., 478.

H. & T. C. Ry. Co. vs. Conrad, 62 Texas, 627.

Woodworth vs. St. Paul M. & M. Ry. Co., 18 Fed. Rep., 282.

Mo. Pac. Ry. Co. vs. Summers, 71 Texas, 700.

Green vs. Cross & Eddy, Receivers, 79 Texas, 130.

Naylor vs. Ry. Co., 5 A. & E. R. R. Cases, 406.

Wonder vs. Baltimore Ry. Co., 32 Md., 411.
Crilly vs. T. & P. Ry. Co., 53, A. & E. R. R. Cases, page 104.
Kohn vs. McNulta, Receiver, 147 U. S., 238.

V.

A railway company is not liable to an employee for injuries received through the negligence of a fellow-servant engaged in the same line of employment.

It is needless to cite authorities supporting this proposition.

We submit to the court that all of the above assignments of error are well taken; that they present correct propositions of law which were directly applicable to the issues involved in the case on trial, and which were not covered by proper charges given by the court. An analysis of the court's charge will show, first, a statement of the plaintiff's pleadings. The court then, in paragraph 3, announces an abstract principle of law as to the degree of care that should be exercised by a railway company in furnishing machinery, and then gives the definition of "ordinary care," and in paragraph 5 of the charge it also announces an abstract principle of the law as to the duties of an employer in connection with machinery. In the 6th paragraph it states that the burden of proof is on the plaintiff to show certain facts, but in no part of

his charge does it instruct the jury that the burden of proof is not only on the plaintiff to establish certain things, but that this must be established by a preponderance of the testimony, and in no part of his charge does it instruct the jury upon a state of facts peculiarly applicable to the case at bar.

The charges as asked, we submit to the court, are correct expositions of the law, and are not based upon any assumed facts, but are peculiarly applicable to the case at bar. They are not merely the announcement of abstract principles, but are instructions to the jury for their guidance in arriving at a correct conclusion in the case on trial, and although we appreciate fully what has been said by the Court in the case of Improvement Co. vs. Stead, 95 U. S., page 166, which is cited in the case of Texas & Pacific Ry. Co. vs. Cody, 67 Fed. Rep., 73,

"that it belongs to the judicial office to exercise discretion as to the style and form in which to expound the law and comment on the facts,"

yet that decision itself holds that it is the duty of the court to explain the *whole law* applicable to the *case in hand*, and it has been repeatedly held that a court has not performed its duty in merely announcing abstract definitions of law and in refusing to give special charges which were proper expositions of the law and *made applicable* to the *particular facts* involved in the case on trial. It was said in the case of Texas and Pacific Ry. Co. vs. Bryant, 56 Fed. Rep., 803 :

"As to the questions of law, parties well advised do not materially differ on most of these in a case. The attorneys and the trial judge understand this, and understand it so well that the trial judge may find it dif-

ficult to realize that the most intelligent uninstructed jury may have their view of the real issues greatly obscured by these matters of law and fact about which, at the close of the evidence, there is really no dispute. Therefore, it is the duty of the trial courts to bring these real issues clearly to the attention of the jury; and especially in those personal injury cases, where the liability rests, often, not on any issue as to the fact or extent of the injury, but on the proof of negligence on the part of the party sued, care should be taken to bring to a focus, on the real issue in the case, the light of instructions applicable to all the material evidence on that issue."

In the case of Texas & Pacific Ry. Co. vs. Reed, 31 S. W. Rep., pp. 1058–9, the court charged the jury in a general way, what degree of care a person is required to use, etc., to protect himself against injury. A special charge was asked upon the plea of contributory negligence, the said special charge being adapted to the *peculiar facts of the case.* The Supreme Court of Texas say:

"We are of the opinion that the defendant was entitled to a charge on contributory negligence *specially adapted to the facts of the case.*"

We further appreciate the rule laid down in the case of Texas & Pacific Ry. Co. vs. Cody, 67 Fed. Rep., 73, citing from 85 U. S., 166, that "a judge is "not bound to charge upon assumed facts in the *ipsissima verba* of counsel, nor to give categorical answers to a judicial chatechism based on such assumption," but we respectfully submit that the special charges asked for by counsel in this case are not upon any assumption of fact, but are pertinent to the issues raised by the pleadings, and are supported by the facts, as testified to by the witnesses.

We further submit to the court that it is a conclusive presumption that jurors are ignorant of the law. It is further a presumption that the trial judge is learned in the law, and it is also made the duty of the trial judge to instruct the jury as to the law applicable to the *particvlar case on trial*, and although the judge is not bound to charge in the "*ipsissima verba* of counsel," neither is he expected to sit on the bench and repeat a formula or announce abstract propositions of law, without making any direct application of them to the case in hand. And the court, as we have before stated, will, by an examination of the charge, paragraph 3 and 5, see that the trial judge merely announced a definition (paragraph 5 being a quotation, almost verbatim, from the case of McDade vs. Ry. Co., 135 U. S., 504); and in support of our argument that the court should give a charge applicable to the case at bar, and as an illustration of the fact that our *nisi prius* judges are given to the mere announcement of abstract propositions, we cite the court to the case of Patton vs. Texas & Pacific Ry. Co., reported in 61 Fed. Rep., 266, where it will be found that the court announced the same abstract propositions as are announced by the learned judge in this case, and actually cited to the jury the book and page of the report containing same.

Again, the court nowhere in its charge, instructed the jury upon the points set out and saved by the seventh and eighth assignments of error. These special charges were submitted upon the issue, which was a very material one, that if the defendant in error knew of the system of inspection in use by plaintiff in error, and with full knowledge of this fact continued in

the service, and working in connection with the machinery that was inspected in this manner, he assumed the risk incident to the character of inspection. This was a material issue in the case, made so by the pleading and the evidence, and should have been submitted to the jury.

We further submit that the court gave no charge whatever upon the plea that defendant in error was injured by the negligence of a fellow-servant. A special charge was asked upon this issue, the same being set out in the sixth assignment of error.

Ninth Assigned Error.

The court erred in refusing to give special charge No. 5, asked by defendant, which is as follows:

"Defendant asks the court to instruct the jury herein to return a verdict for the defendant."

Judge BRUCE, in the opinion below, says:

"The leading fact in the case is the explosion of the boiler while the locomotive was at rest, standing in the yard of the company, with no extra pressure of steam, waiting to take out a train."

He then asks the question:

"How is this to be accounted for? Can it be done on the theory of inevitable accident, which prudence and care could not reasonably guard against? Effects like this must have a cause, and the science of physics is in aid of an effort to discover the cause."

From this premise he reasons from certain evidence in the record that the cause was discovered, and was shown to be the negligent act of the defendant. We respectfully submit that this latter conclusion—that the cause was discovered and shown to be the negligent act of the defendant—is not supported by the

evidence. If the legal proposition is correct—and it undoubtedly is—that a master is only bound to use ordinary or reasonable care in the furnishing of reasonably safe machinery, and a like degree of care in keeping it in a reasonable safe condition, and if the further proposition is correct, that a master is not a guarantor of the safety of an appliance furnished for the use of an employe, then we submit that the facts show that the Texas and Pacific Ry. Co. was not negligent, either in the furnishing of the engine that exploded in this instance, nor has it been shown that the Texas and Pacific Ry. Co. was negligent in keeping said engine in a reasonably safe and proper condition. The only inspection or examination made of the engine or boiler by witnesses who testified in behalf of the plaintiff below was made after the explosion had taken place and examination then was confined to the broken parts of the engine. We submit that the sole act of negligence complained of, and upon which defendant in error rested his case, was the defective condition of the stay bolts of the engine. The testimony varies as to the number of stay bolts estimated to be broken, but ranges as high as three hundred, and the number of stay bolts that were checked or partly broken as high as one hundred and fifty. It is claimed that these stay bolts had all been broken for several months prior to the explosion, and some witnesses claim to know this fact from the amount of rust or sediment on the surface of the bolts themselves. The testimony as to how long said bolts had been broken is based solely upon the amount of rust or corrosion or alkali sediment found upon the broken bolts after the explosion. Parties testify very learnedly that they can tell the date when a piece of iron was broken by simply

looking at the accumulation of rust or sediment on the iron; that they can tell the date when a new piece of iron was first exposed to a moist atmosphere, or when it was first saturated with a solution of lime water, and positively as to the number of months that have elapsed since a new piece of iron has been submitted to the action of a chemical. If the science of physics is called in to aid a jury to discover the cause of an explosion, then we respectfully submit that legislation should be introduced prohibiting the science of physics from being relied upon as evidence in any case. These scientific experts were not even advised of the ingredients composing the solution in which these stay bolts have been immersed; were not advised of the fact as to what per cent. of lime was contained in the water into which they had been submerged, nor as to the character of gases, the action of which they might have been submitted to before the explosion; in fact, were not advised of anything except that they saw broken stay bolts, and from this fact alone could positively say that they had been broken for months.

The court will understand, from reading the record, that defendant in error's counsel were fully advised of the fact that it was necessary to show that these stay-bolts were broken prior to the inspection made by Stevenson in January, 1893, about one month before the explosion. They well knew this from the fact that their own witnesses testified, some that an inspection every three to six months was sufficient, while others said once a month. They appreciated the fact that it was necessary to show, if possible, that these stay-bolts were broken prior to the inspection by Stevenson, and they claim to have shown that these bolts were broken

prior to the inspection, solely by the accumulation of rust or alkali sediment on the bolts themselves.

We submit that it is hardly reasonable to expect that men of sound and reasoning minds should believe that men, who are not even experts in their business; are not even practiced boiler makers or inspectors; are not manufacturers of iron; are not chemists, and who do not testify that they are familiar with the action of certain corrosives upon metal, can testify, with any certainty, that a piece of metal was broken on a certain date, from the amount of rust or alkali sediment on its face. As an evidence of the absurdity of the expert testimony on the part of the defendant in error, that these stay bolts had been broken some three months prior to the accident, and that they knew this fact from the amount of rust or sediment on same, we beg to call the court's attention to the fact that this assumption could only be based upon the fact that the breaks in the stay bolts were made at the same instant, for the reason that if the stay bolts were broken by the gradual process of the working up and down of the sides of the firebox, then, according to this scientific testimony, the accumulation of rust particles or alkali sediment would be graded in proportion to the time that it took all the stay bolts to become entirely severed or broken. In other words, this testimony would mean that about three hundred of the stay bolts were broken clear through at the same time; that the breaks did not occur by the gradual process caused by the friction of the bolt working up and down; and we submit it is absolutely unreasonable to suppose that if all these bolts were broken or severed three months before and not by a gradual process, that this engine would have exploded at least three months

earlier than it did. There is no reasonable man who would suppose that an engine, with three hundred broken stay bolts in it, would have been able to perform heavy service for three months after they were broken, and up to the very date of the explosion, especially when the fact appears that there were ony about seven hundred stay bolts in the entire engine.

Further to show the fallacy of the expert testimony upon the part of defendant in error's scientists—that they could tell the date when these stay bolts were first broken, or the length of time that they had been broken—the testimony shows that these bolts when they did break, did not drop down between the sides of the fire box, but retained their position, and as the fire box was hot or cold the bolts would expand or contract; in other words, the broken ends would be in constant friction by this expansion and contraction. This, of itself, would wear away the corrosion or alkali sediment from the ends of the bolts.

We further call the court's attention to the fact that the witnesses upon the part of plaintiff in error, who are shown to be thoroughly posted in their various employments, testified that it is a physical impossibility to say how long a stay bolt has been broken.

We desire now to call the court's attention to the testimony on the part of the plaintiff in error bearing upon the question that the Texas and Pacific Ry. Co. used all reasonable care in the purchasing of engine 219, the same having been purchased from a manufacturer of recognized high standing, and used all reasonable care in the manner of inspecting and keeping said engine in good order and condition. The proof shows that

engine 219 was built by the Baldwin Manufacturing Company, whose engines are recognized to be the best that are used; that it arrived at Texarkana in December, 1890; that the Baldwin company tests its engines before sending them out; that before this engine was put in use on the road it was subjected to a test by the Texas and Pacific Ry. Co. by being blocked up in the shop and run like a stationary engine; that it was tested by the cold water [or hydraulic] test. (See testimony of Joseph Patton, Tr., pp. 38, 39).

The evidence of witnesses of plaintiff below is to the effect that the hammer test is the customary and usual test in use by all the railroads to discover defective stay-bolts, and that the hammer test was used in the examination or inspection of engine No. 219 in order to discover defective stay bolts.

The evidence shows that the engine was subjected to the cold water or hydraulic test before being put into use. The question before the jury was not as to the original test to which the engine was subjected, but the test used by the company after it was once put into use to discover whether or not there were any defective stay-bolts. There is not a particle of direct evidence upon the part of the plaintiff below to the effect that the Texas and Pacific Ry. Co. did not have a competent inspector to inspect this engine, nor that the engine was not properly inspected within a reasonable time before it exploded, while the proof upon the part of defendant below, as shown by the record, is to the effect that it had a competent inspector at Longview, Mr. Stevenson; that this engine was properly inspected by him within a month prior to the date of its explosion, and no defective stay-bolts were found. The preponderance of the

testimony, both upon the part of the plaintiff's witnesses and those of defendant below, is to the effect that testing once in three months, to ascertain defective stay-bolts, is sufficiently frequent. When the fact is considered that this test was made about thirty days prior to the explosion, and the proof shows that it was made by a competent inspector; that no defective stay-bolts were found, and that there is not a particle of direct testimony that these broken stay-bolts were not broken between the date of the test, January 22d, and the date the engine exploded February 19, 1893, we submit that there is positively no testimony on the record showing negligence upon the part of plaintiff in error in the manner of inspection of stay bolts, or in the selection, originally, of a safe machine. It is a well settled proposition of law that railway companies are not obliged to apply extraordinary tests to machinery to discover latent defects. As was said by the Supreme Court in the case of Richmond & Danville Ry. Co. vs. Elliott, 149 U. S., 271, 272:

"With regard to the defect in the iron casting which seems to have been revealed by the explosion, [in the case a defective stay bolt was revealed by the explosion], it may be said that it is not necessarily the duty of the purchaser of machinery, whether simple or complicated, to tear it to pieces to see if there be not some latent defect. If he purchases from a manufacturer of recognized standing he is justified in assuming that in the manufacture proper care was taken and proper tests were made of the different parts of the machinery, and that as delivered to him it is in a fair and reasonable condition for use. We do not mean to say that it is never the duty of a purchaser to make tests or examinations of his own, or that he can always and wholly rely upon the assumption that the manu-

facturer has fully and sufficiently tested it. It may be, and doubtless often is, his duty, when placing the machine in actual use, to subject it to ordinary tests to determine its strength and efficiency."

In the case at bar, not only was the engine purchased from a manufacturer of recognized standing, but it was tested by The Texas & Pacific Ry. Co. before being put into active use (See testimony of Joseph Potton, Tr., p. 38). And there is not a particle of evidence in this record that the company did not make proper and reasonable tests to discover defective stay bolts, after the engine was put in active use. And further that the test or examination used to discover defective stay bolts was the usual and ordinary test applied by railway companies.

In the case of Louisville & Nashville R. R. Co. vs. Allen, Admr., 78 Ala., 494, where a person was accidentally killed by the explosion of the boiler of a steam engine, the defect in the boiler, which was the cause of the explosion, was a latent or secret one, not visible or capable of discovery from the closest inspection from within the engine or without, being a flaw or crack in the upper part of one of the boiler sheets, between two plates where they overlapped. The court in discussing the case says:

"It has been said that this defect was latent, and very manifestly could not have been detected by the most careful inspection. It is shown, moreover, that inspections were made of this and other engines at stated times, and with sufficient frequency, and by competent officials; and they failed to detect the defect. No negligence can be based, therefore, upon the failure to discover it by inspection merely, because, we repeat, it was latent, and not so discoverable.

"The burden of proof in this case is on the plaintiff, to prove negligence; and this is not shifted by proving

only the fact of injury from the explosion of the boiler. Such is the rule where an employee or servant sues, although a different principle is held to prevail where an injury is receieed by a passenger on a railroad, in consequence of a defect in any of its machinery or appliances."

Citing:

M. & M. R. Co. vs. Thomas, 42 Ala., 672 715.

Pierce on Railroads, 382, 383.

Illinois Central R. Co. vs. Housk, 82 Ill., 285.

The court further say:

"The only two tests suggested are those of steam and water. The first, by reason of its danger, is shown rarely, if ever, to have been resorted to by railroads, or other companies using steam boilers. It is neither practicable nor approved, because it serves to bring about the very thing it was intended to prevent. The one question, then, is, whether the company was guilty of a want of ordinary care, by failing to resort to the water or hydraulic test, which consisted in applying a certain number of pounds pressure of water to the boiler by the aid of a suitable pump. It is testified by experts that such tests, when made, are liable to strain the fibre of the iron, and impair the strength of the boiler, and thus, in themselves, tend to increase the hazard of explosion."

The court further proceeds:

"We conceive the correct and just rule to be that a railroad company's duties to its employees does not require it to adopt every new invention or appliance useful in its business, although it may serve to diminish risks to life, limb or property incident to its service. It is sufficient fulfilment of duty to adopt such as are ordinarily in use, by prudently conducted roads engaged in like business, and surrounded by like circumstances. Nor can it be exacted of such common carriers that they should adopt extraordinary tests for discovering defects in machinery, which are not approved, practicable and customary. * * * The evidence shows, without conflict, that the hydraulic test, as applicable to steam boilers, was an extraordinary and rare

test, not in customary or common use by either railroads or other persons, except when engines are first manufactured to be put on the road, unless they failed to work well, or except when engines were overhauled periodically in the workshops of the company."

The court held that the court below erred in not instructing the jury to find for the defendant.

We submit that, upon the record, the case at bar presents a stronger case for the defendant than the one so decided by the Alabama court; that, so far as the testimony goes, it shows a proper degree of care in the purchase of the engine, a proper degree of care in its inspection before putting in active use, and a proper degree of care in inspection after it had been put in active use. Considering the fact that the burden of proof is upon the plaintiff to prove negligence in the company in failing to use a reasonable degree of care in the purchasing of the engine; in keeping it in proper repair; and in failing to discover the defect, we submit that the plaintiff totally failed to make out a case against the defendant. And we further respectfully submit that the burden of proof was upon the plaintiff below to show the *cause* that produced the *effect* in this instance—to wit, the explosion of the engine—and the burden of proof upon him was not only to show the cause, but to show that the negligent acts of the Texas & Pacific Ry. Co. created this cause, and this, we respectfully submit, has not been shown.

The judgment of the circuit court of appeals should be reversed and remanded.

JOHN F. DILLON,
WINSLOW S. PIERCE,
DAVID D. DUNCAN,
For the Railway Company.

Office Supreme Court, U. S.
FILED.
MAR 27 1897
JAMES H. McKENNEY,
CLERK.

IN THE

Supreme Court of the United States.

OCTOBER TERM, 1896.

THE TEXAS AND PACIFIC RAILWAY COMPANY,
Plaintiff in Error,

vs.

W. K. BARRETT, Defendant in Error.

No. 247.

Error to the United States Circuit Court of Appeals for the Fifth Circuit.

Brief for Defendant in Error.

This was a suit for damages begun in the District Court of Tarrant County, Texas, but subsequently removed by the defendant company to the Circuit Court of the United States for the Northern District of Texas.

Barrett claimed he had been injured by an explosion of an engine owned by the railway company, while he was in its employ—and that by the negligence of the company altogether, he being free from any negligence—his position being that of night foreman of the switch engine in the yards of the company. (Rec., pp. 2, 3, 4.) Upon trial had, the jury rendered a verdict in favor of Barrett for $3,800, and judgment was accordingly entered for that amount. (Rec., p. 14.) Motion for a new trial was made by the railway company, and same was overruled

(Rec., p. 17), whereupon the company sued out a writ of error from the Circuit Court of Appeals for the Fifth Circuit, and there the judgment was affirmed. (Rec., p. 70.) The case comes to this court upon writ of error prosecuted by the railway company, and the errors complained of are numerous—the same being not set out here *in extenso*, but can be found on pages 71, 72, 73 of the record.

It is believed, at any rate, to be unnecessary to set them forth, as they are now about stereotyped in this court in the almost countless appeals taken here by this same plaintiff in error. The court might almost be supposed to know in advance what they are. We will notice them just as they come up naturally in the investigation of the whole case. But there is one thing touching the removal of the cause we may here call attention to.

The suit in the State court was properly brought, and jurisdiction in that court appeared when the company appeared and moved for a removal—it was bound in the petition to show jurisdiction in the United States court to which removal was sought. The jurisdiction in the Federal court must appear from the petition to remove. It does not have to appear in the original declaration or complaint. This is the very purpose of the petition to remove, and the matter stands as if suit were brought in the Federal court in the first instance. It can not be left to the party seeking a removal to ask to go into the Federal court, and when there by a proper petition, then to say he is wrongfully there, because the declaration or complaint in the State court may have been defective in some way.

Bushnell *v.* Kennedy, 9 Wall., 392;
Insurance Co. *v.* Pechener, 95 U. S., 183;
Amory *v.* Amory, *ib.*, 186;
The T. & P. Railway Cases, 115 U. S., 1.

See especially Briggs v Spaw 95 U.S. 401.

The case, then, in its substance, is this:

On the 19th day of February, 1893, W. K. Barrett was in the employ of the Texas & Pacific Railway Company in the capacity of night foreman of the switch engine in the yards of said company at Fort Worth. His duties as such required him to be over and about the yards in directing the movement, deposit and departure of trains and engines. On the night of the day above mentioned the company, by the officers and agents, placed upon the track in the yard a locomotive engine in which a great many stay bolts were broken and were otherwise weak and defective. While the appellee was standing near this engine, in the discharge of his duties, it exploded, blowing him a great distance and seriously and permanently injuring him. For the injuries received, he brought suit for the sum of $20,000 damages, and $500 for medical fees and medicines expended by him. There was no question at the trial of the sufficiency of the allegations of negligence and carelessness upon the part of the company, its agents and officers, occasioning the explosion causing the injuries.

The defendant company answered by general demurrer and denial, and specially pleaded:

1st. That the explosion was caused by the negligence of a fellow-servant.

2d. That the company did exercise due care in the selection of an engine and keeping it in reasonable repair; and,

3d. That it exercised due care in the selection of its servants, whose duty it was to inspect said engine and keep it in repair.

Upon these issues the trial was had, on which it was proved that prior to and at the time of the explosion the

appellee was robust in health and physique, that he had been for many years in the employment of railways and had become skilled in the particular duties of his employment with the defendant company. That he had nothing whatever to do with the particular engine No. 219, that exploded; it had been ordered out and placed on the track by the round house foreman, and it was not his duty to inspect or control it. That he was standing opposite the engine, discharging his special duty, when it exploded. That he was struck by a part of the engine's jacket, scalded, and was thrown a great distance by force of the explosion. That he was injured in his face, spine, hip, back and body generally; was laid up for six weeks in bed, was on crutches for two and one-half months, and in addition to his great pain and suffering, was disabled and permanently incapacitated from performing the duties for which he had educated himself by long service and experience, and was unable to perform any work requiring much physical effort. (Rec., pp. 17, 18, 19.) That he contracted and paid his medical bill in consequence of his injuries. That he was earning at the time of the injuries received $98.00 per month, but was not now able to work.

That he and his wife, at the time of trial, were trying to run a hotel, but with small results. (Rec. 19.)

E. D. Capps, the attending physician, testified as to the seriousness of injuries received and the permanency of the troubles resulting therefrom.

Cause of Explosion.

Five witnesses, engineers and boiler makers, who were present at the time of the explosion, or on the ground very soon after (Rec., pp. 21–32), testified to seeing and examining the boiler and the fragments thereof after the explosion. These witnesses testified that from 100 to 300 stay bolts in said engine were broken, and that from

100 to 150 were broken before the explosion and at different periods, to wit: Three, six and nine months prior. (Rec., pp. 26, 28, 31, 35.)

It was further shown by the evidence of these witnesses that any test, whether by hammer, hydraulic or by drill, would have demonstrated and detected that these bolts were broken and the engine unsafe.

It was admitted by defendant's witness that nineteen were broken before the explosion (Rec. 46, 47) on one of the side sheets of the fire-box examined by him.

As to Inspection.

It was shown that the inspection was made by a man by the name of Stevenson, with a young man assisting, about 20 years of age, who had been with the company two and one-half years. (Rec., p. 57.) The man Stevenson, who inspected with the lad who testified, was in the employ of the company five or six months (p. 57). He left shortly after the explosion, and it was not known from whence he came, where he was employed or whither he went after the explosion. (Rec., p. 53.)

It was further shown that if the engine had been tested in an accurate and thorough way the broken bolts could not possibly have been overlooked. (Rec., pp. 24, 27, 34.)

It was admitted by all that an engine with its stay bolts broken, as testified to in the case at bar, was unsafe.

The appellant sought in special instructions 1, 2, 3, and 4 (Rec., pp. 60–1), which it requested the court to give, to enforce its theory of the defense as contained in its special answer, which was—

1st. That after the defendent railroad had used ordinary care in the selection of an engine and in the selection of a competent man to inspect it that the company had performed its full duty to its employés and the public; and

2d. That if the servant so selected for the inspection and keeping the engine in proper repair was negligent, then it was the negligence of a fellow-servant, for which the company was not responsible.

The court properly refused these instructions because not consistent with law, reason, or authority.

We submit as counter propositions to demonstrate the correctness of the court's refusal to charge the jury as requested—

Duty of Master.

1st Proposition.—The duties of the master are to furnish—(*a*) proper machinery; (*b*) competent servants.

55 Tex., 611;
78 Tex., 294.

2d Proposition.—The company can not delegate these duties.

78 Tex., 294, 486;
73 Tex., 85;
64 Tex., 600;
57 Tex., 501;
49 Tex., 188;
59 Tex., 334.

Fellow-Servant.

3d Proposition.—For this reason the inspection of machinery is a duty of the company, and an inspector appointed for this purpose is not a fellow-servant with employés in its use or in other departments of the company's service.

57 Tex., 501;
59 Tex., 334;
49 Tex., 188;
39 Fed. Rep., 317.

And the negligence of the inspector is the negligence of the company.

Herbert *v.* R. R., 116 U. S., 647;
78 Tex., 294, 486:
64 Tex., 600;
76 Tex., 103;
75 Tex., 153;
22 S. W. R., 110.

4th Proposition.—Sending out an engine in a crippled condition is the negligence of the master.

39 Fed. Rep., 317;
116 U. S., *supra.*

ASSUMING RISK.

5th Proposition.—An employé only assumes risks ordinarily incident to his employment.

73 Tex., 262.

Not those unknown to him.

11 S. W. R., 916;
49 Tex, 345.

Nor those superadded by wrongful or negligent acts of master.

63 Tex., 549;
62 Tex., 627;
70 Tex., 624.

Employé has the right to expect the exercise of care, proportioned to the hazardous nature of the machinery.

Hough's case, 100 U. S., 213–17;
116 U. S., *supra.*

And has the right to count on this prudence and care.

Ross' Case, 112 U. S., 377–383;
51 Fed. Rep., 566.

Especially are these rules of trust upon the part of the employé applicable, when the defect causing the injury did not arise in the line of his duty and employment, nor where he was called upon to examine into the fitness of the machinery furnished.

79 Tex., 104;
59 Tex., 255–59;
49 Tex., 181;
75 Tex., 63.

NOTICE TO COMPANY.

6th Proposition.—When, with the use of *ordinary care*, the company could have discovered the weakness or defect, then it is charged with notice.

70 Tex., 623.

Ordinary care is the care which prudence and the exigencies of the case or situation demands, or hazards reasonably anticipated.

67 Tex., 473;
73 Tex., 25;
82 Tex., 473;
53 Tex., 111;
49 Tex., 190.

Applying these settled rules of law to the case as made by the evidence, it can be readily seen that the court did not err in refusing the instructions asked.

The rule that requires a reasonable safe engine to be furnished does not, as clearly intended in defendant's requested charge, involve the question from whom it was originally purchased or who constructed it, but refers simply to the fact that the engine when taken from the round house and turned over to the employés for service must be reasoably safe at that time. It is the

continuing duty of the master from day to day, and not performed, once for all, in the original purchase from some one of the standard builders of locomotives.

The request that the court should charge that if the defendant used ordinary care in selecting originally a reasonably safe engine, and if such engine was turned over to a competent man, it would be relieved from liability, was not the law and was properly refused.

Nor was the selection of a competent man to inspect and take care of this engine, reasonably safe when purchased, in any respect the full measure of the master's duty. The primary duty of furnishing suitable machinery and keeping it in a reasonably safe condition could not be delegated to an employé, agent or officer. It remained with the master, no matter by whom performed, and whatever may have been the character of the person so appointed to perform this duty. The liability of the master to the employés generally for the careful performance of this primary duty could not be shifted, because of the character of this employé, for competency, or otherwise, to whom the master had assigned the work of inspection and repair.

His mistakes and negligence were those of the master. (See authorities under second and third propositions, *supra*.)

The contention for the correctness of the charges asked must be based upon the fact that the agent, officer or employé charged with the duty of inspection and keeping in repair the instrumentalities required in railroad traffic, is a fellow-servant with the employé injured through his negligence or incompetency. This contention can not be maintained.

In the Railway Co. *v.* Herbert (116 U. S., *sup.*), the court says that if one be appointed to see that the machinery and appliances * * * are kept in repair and in good working order, the company is liable for the injuries re-

sulting from his negligence in its performance, for in so far as that duty is concerned he is the representative of the company. Such employment is not common to that in which the person injured is engaged, and in regard to which the person injured has a right to look for care and diligence on the part of the other person as the representative of the common master.

In this case the court, by Justice Field, approved the cases of Fuller *v.* Jewett (80 N. Y., 46) and Ford *v.* Fitchburg R. R. (110 Mass., 247), which were cases of injuries from boiler explosions, and in which the doctrine above announced was applied as the law controlling the liability of the railroad.

In the City of Minneapolis *v.* Sundin (58 Fed. Rep., 527), the doctrine is tersely put in the following language:

"An employé discharging a *personal* duty of the master stands in the place of the master, and the latter is liable for any negligence in the discharge of the special duty."

The Texas decisions have still been more emphatic in maintaining this doctrine.

In H. & T. C. R. R. *v.* O'Hare, the court says:

"It is the duty of the railroad company to use great care in furnishing its employés safe machinery to be used in the prosecution of its business, and the person to whom this duty is confided must be regarded as the representative of the company for this purpose, and if injury results from the failure to furnish safe machinery, the company will be liable."

It is respectfully submitted that this would be true, though the employé was not free from contributory negligence.

56 Fed. Rep., 994;
Fuel Co. *v.* Damilson, 57 Fed. Rep., 915;
Cumming's case, 106 U. S., 700;
83 Tex., 629.

In Railway Co. *v.* Kernan (78 Tex., 294), the court says:

"The railroad company can not relieve itself of the duty of furnishing safe machinery by charging the servants with its performance."

In this case it was the negligence of a car inspector causing the injury and the company was held chargeable for the injury received.

See, also,

T. & P. R. R. *v.* O. Fiel, 78 Tex., 486;
Railway *v.* Farmer, 73 Tex., 85;
Railway *v.* Bell, 75 Tex., 53.

In 39 Fed. Rep., 317, Judge Maxey reviews the Texas cases and approves the doctrine that the person charged with the duty of inspection of machinery before being delivered for use represents the company and is not a fellow-servant. We, therefore, submit that the special charges asked for and refused (Rec., p. 60) were properly refused.

The fourth special charge appearing among the refused charges (p. 60), in so far as it related to the burden of the proof devolved on the plaintiff, was given in sixth general charge of the court. (Rec., p. 62.)

The fifth special charge asked, in the light of the facts, was clearly erroneous.

It is respectfully submitted that the propositions and authorities above cited dispose of the 4th, 5th, 6th, 7th, and 8th assignments of error.

In the first assignment of error it is complained that the court erred in its statement of the case to the jury, in that it called attention of the jury to the fact that plaintiff had alleged "that the sheets of many parts of said engine and its boiler were corroded and eaten away by rust," because it submits to the jury an issue upon which there was no evidence. With due deference, it is

submitted that the objection, even if fairly stated, is puerile, and if erroneous was against the plaintiff, for assuming the truth of the assignment, it required the jury to believe these facts when there was no evidence as stated by appellants to prove them.

The court will see by the record (pp. 3–61) that the learned judge below simply stated the pleadings of plaintiff preparatory to defining the duties of the company to its employés and stating what the jury must believe *from the evidence* to render the company liable.

The statement of the court, using the language of the petition, was:

"Plaintiff in his pleadings says that said engine and its boiler were defective in this: That many of the stay-bolts in the boiler were broken and that bands of many of the stay-bolts were worn and corroded by rust. That the sheets of many parts of said engine and its boiler were corroded and eaten away by rust," etc.

After further stating the injuries alleged and defining "ordinary care," the court charged the jury, to render the defendant liable, it must believe from the evidence that the boiler which exploded and injured the plaintiff was *defective and unfit for use*, and that defendants' servants, whose duty it was to repair such machinery, knew or might have known, etc. (Rec., p. 62.)

The court thus properly submitted the issue: Was the engine defective in any manner and form, as alleged by plaintiff? If so, the liability of the plaintiff, with the proper limitations as stated, would be fixed.

The evidence upon which the allegations of the petition and charge of the court was based was substantially as follows: That the explosion took place in the yards at Fort Worth; that one of the side-sheets was blown 300 yards away; the water tank was 40 feet from the engine and fire-box was found by the side of it; the wagon top,

driving wheels and shell of boiler were found scattered about; fully 300 of the stay-bolts showed old breaks. (Rec., pp. 22, 23, 24, 25, 26, 27, *et seq.*); the broken parts were badly corroded and scaled; one-third of the stay-bolts were entirely broken prior to the explosion and had been broken for several months; some of the bolts had pulled through the side-sheets and were not broken. A stay-bolt is a bolt to stay the fire box and side-sheet apart, also the back-head and throat-sheet, and to resist the pressure of the steam and water on the surface of the boiler. The stay-bolts that showed old breaks were corroded and scaled upon the broken surface. (Rec., p. 23.) There may have been very few of the old breaks that occurred within 40 days of the explosion, but the most of them were of longer standing, several months at least, and some of them probably a year. If said engine had been tested in any accurate way within from 25 to 40 days before the explosion, the broken condition must have been discovered; if tested at all, they could not possibly be missed or overlooked (Rec., p. 22); an engine with broken stay-bolts in it would be unsafe and weak. (Rec., p. 24.)

The above was substantially the testimony of five witnesses, expert boiler-makers and engineers, who had examined the parts of the exploded engine shortly after the occurrence. (Rec., pp. 22–38.)

It can be readily seen that there could be no misconstruction of the court's meaning, "that if they believe from the evidence that the boiler which exploded and injured the plaintiff *was defective and unfit for use*," etc.

Assuming that the assignment of error was borne out by the facts, we submit there could be no grounds for reversal. In Cochrane *v.* Winburn (13 Tex., 144), the court says if no evidence to authorize charge, the jury may disregard it. In Andrews *v.* Southwick (20 Tex., 211) the court says while it may be error to charge

upon an issue with no evidence to support it, yet it must appear that the jury was misled by it.

In 23 S. W. R., 49, the court say an erroneous instruction immaterial if no other verdict should have been rendered under the facts.

It is clearly evident that even with the construction placed on the charge by counsel, the jury could not have been misled.

But appellants claim that the court erred in its definition of ordinary care.

The court instructed the jury, in substance, as requested by the special charges asked by the appellant (Rec., p. 61) upon the care necessary to be exercised by the railroad company in order to evade liability.

The charge given (Rec., p. 62) is as follows:

"A railway company is bound to use ordinary care to furnish safe machinery, etc., and if ordinary and *reasonable* care is not exercised by the company to do this it would be responsible," etc. "By ordinary care is meant such as a prudent man would use under the same circumstances—it must be measured by the character and risks of such business; and where such persons whose duty it is to repair the appliances of the business, know, or ought to know, by the *exercise of reasonable care*," etc.

Again, in the fifth section of charge (page 61) the court again charges that while the employer is not bound to insure the absolute safety of the mechanical appliances, etc., nor bound to supply the best, safest and newest, etc., yet he is bound to use all *reasonable care and prudence* for the safety of those in his service, etc. The objection that includes the definition of ordinary care is that it leaves to the jury too much latitude, because they might hold the defendant to the exercise of the care of the *most* prudent man. It is submitted that this is an exaggerated inference. The court emphasizes the fact that it intends to require only the reasonable care of a prudent man by

twice charging it. But it is useless to waste further time on the assignment, for the definition of "ordinary care" as given by the court is in the exact language of the Supreme Court of Texas.

R. R. *v.* Oram, 49 Tex., 341, approved;

R. R. *v.* Lyde, 57 Tex., 509, and again in 72 Tex., 44.

There is no merit in the seventh assignment of error.

The special charge No. 4 as to the presumption that defendant performed its duty, etc., is covered by the sixth charge of the court (Rec., p. 61), and the special charges asked by the defendant below and which were given by the court. In both instances the plaintiff was charged with the burden of proof in showing defects. If any error was committed it was against the plaintiff in giving undue prominence to the presumption in favor of defendant by twice charging the necessity of plaintiff proving the defects and that the explosion was consequent upon them.

The charge of the trial court (Rec., 60 *et seq.*) and the opinion of the Circuit Court of Appeals (Rec., 70 *et seq.*) furnish ample reason and law for the decision in this case, and we ask close perusal of them.

We have argued the assignments that were before the Circuit Court of Appeals, for they are brought back here by the assignments before this court.

In conclusion, it is submitted that the record shows:

1st. That appellee was an employé of appellant as night foreman of a switch engine in appellant's yard at Fort Worth.

2d. That appellant caused to be placed upon the yard an engine with broken stay bolts, rendering it weak, defective and dangerous.

3d. That the defects causing said explosion were old and long standing, and a reasonable inspection by appellant would have necessarily discovered them.

4th. That appellee had nothing whatever to do with this particular engine or responsible in any manner for its condition. That he did not know of its condition, nor were his duties such as required him from inspection or otherwise to know it.

5th. That said engine because of its defective condition exploded while appellee was standing near it performing the duties of his particular department.

6th. That appellee by said explosion was seriously, painfully, and permanently injured.

7th. That at and prior to the explosion appellee was a young man, robust and vigorous in physique and health, and earning $98 per month in an employment in which he had been educated, and with the duties of which experience had made him familiar; but by reason of injuries received as aforesaid he was permanently incapacitated to pursue or earn a living in any other way because of his diminished capacity to labor.

8th. That the defense was based upon theories, to support which there was neither law nor precedent.

9th. That the charge of the court was correct, and if any error, too favorable to appellant. The whole issue was submitted to the jury and they passed upon it.

10th. That the verdict of the jury was extremely moderate. The verdict could have, with all propriety, been much larger.

11th. That it appears upon the face of the record, without any doubt whatever, that this appeal is for the purpose of delay, and an affirmance with damages is asked.

Rev. Stat., § 1010, and rule 23 of this court;
T. & P. Ry. Co. *v.* Volk, 151 U. S., 73.

Very respectfully,

A. H. GARLAND,
R. C. GARLAND,
For Defendant in Error.